



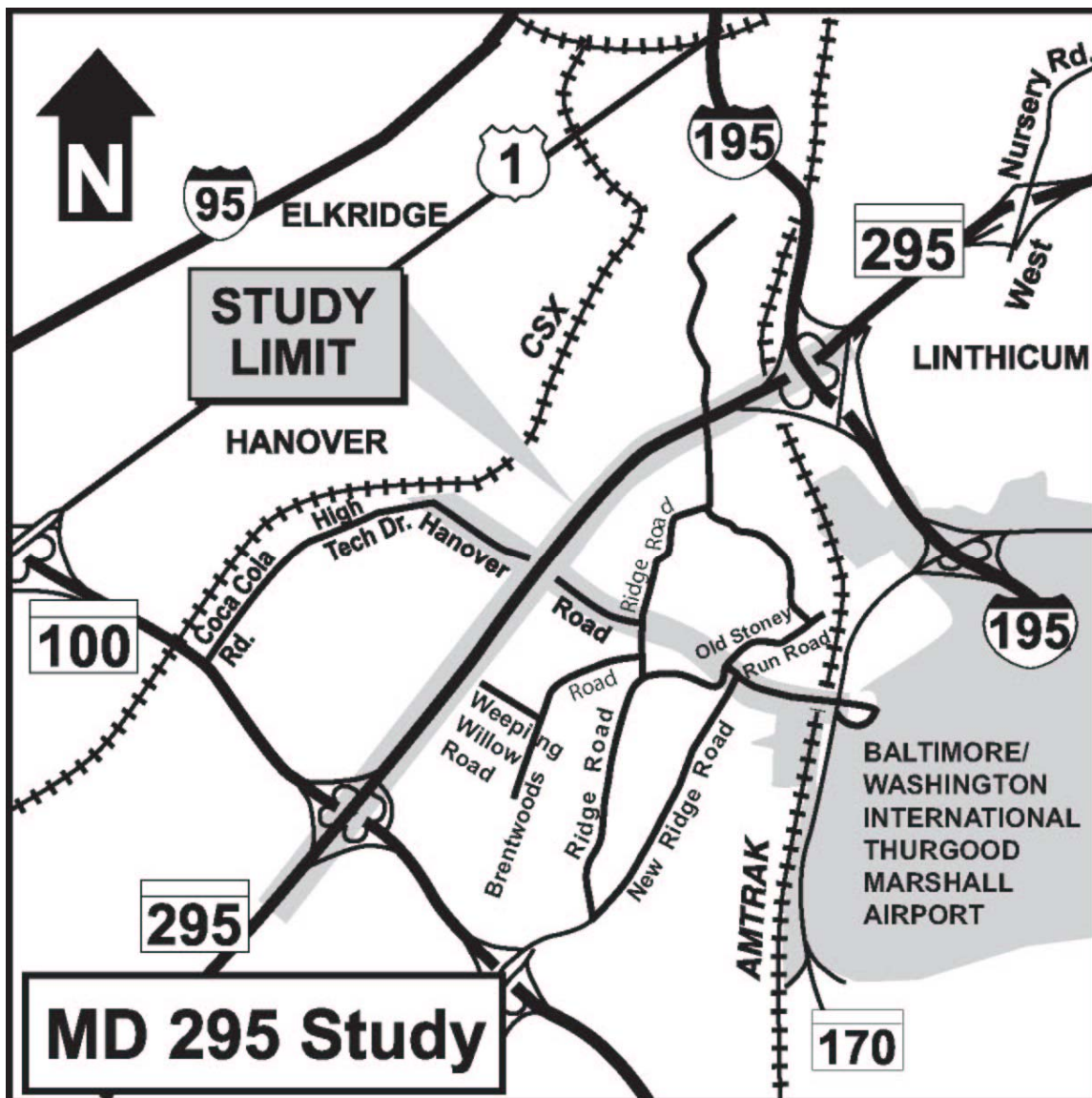
Environmental Assessment

SHA Project Number AA372A11



MD 295 Project Planning Study

From MD 100 to I-195 and Hanover Road from High Tech Drive in Howard County
to MD 170 (Aviation Boulevard) in Anne Arundel County



prepared by:

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

**FEDERAL HIGHWAY ADMINISTRATION
DELMAR DIVISION**

MD 295 PROJECT PLANNING STUDY

**MD 100 to I-195 and Hanover Road from High Tech Drive to MD 170 (Aviation Boulevard)
Howard and Anne Arundel Counties, Maryland**

ADMINISTRATIVE ACTION

ENVIRONMENTAL ASSESSMENT

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION**

**Submitted Pursuant to: 42 U.S.C. 4332(2)(c); 49 U.S.C. 303
23 U.S.C. 128(a) and CEQ Regulations (40 CFR 1500 et seq)**

**Cooperating Agencies: FEDERAL AVIATION ADMINISTRATION
MARYLAND AVIATION ADMINISTRATION**

**NEIL J. PEDERSEN
ADMINISTRATOR**

DATE

8/31/2007

**RAJA VEERAMACHANENI
DIRECTOR
OFFICE OF PLANNING AND
PRELIMINARY ENGINEERING**

**NELSON J. CASTELLANOS
DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION**

DATE

9/5/2007

for

Summary

SUMMARY**A. Administrative Action**

- ☐ Environmental Impact Statement
- ☒ Environmental Assessment
- ☐ Finding of No Significant Impact
- ☐ Section 4(f) Evaluation

B. Additional Information

Additional information pertaining to this project may be obtained by contacting either:

Mr. Bruce Grey

Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202
Hours: 8:00 a.m. to 4:30 p.m.
Phone: (410) 545-8500

Ms. Denise King

Environmental Specialist
Federal Highway Administration
10 South Howard Street, Suite 2450
Baltimore, Maryland 21201
Hours: 8:00 a.m. to 4:30 p.m.
Phone: (410) 962-4440

C. Description of Proposed Action/Purpose and Need

The purpose of the MD 295 Project Planning Study is to improve the existing capacity, traffic operations, and safety of MD 295 and to enhance Hanover Road as a secondary access to the Baltimore/Washington International Thurgood Marshall Airport (BWI) and surrounding areas. The Federal Highway Administration (FHWA) and the Maryland State Highway Administration (SHA) are the lead agencies for the project. Cooperating agencies include the Federal Aviation Administration (FAA), and the Federal Aviation Administration (FAA) and Maryland Aviation Administration (MAA) are cooperating agencies.

Improvements in the study area are needed to address rapid growth and traffic volumes in one of the fastest growing areas of Anne Arundel County. Large developments such as Arundel Mills Mall and the BWI Business District have all contributed to increased traffic volumes in the area. Due to the expansion of private and government facilities in the area, a heavier traffic demand will be placed on MD 295 as well as Hanover Road, which is a major cross road to Stoney Run Road. BWI is a major facilitator of economic growth not only in the immediate area but also in the entire Baltimore-Washington D.C. Metropolitan Region. Over the past fifteen years, passenger volume has more than doubled and is forecast to continue to grow.

D. Alternatives Considered

The project involves widening MD 295 from a four-lane roadway (two through lanes in each direction) to a six-lane roadway with three through lanes in each direction. The additional width would include a twelve foot travel lane with a ten foot shoulder constructed within the median of MD 295 in each direction, from south of the MD 100 interchange to north of the I-195 interchange. The northern limit of the MD 295 widening would tie into another MD 295 project (SHA project number AA351_21) from I-195 to just south of I-695, which is pending

advertisement. In addition to widening MD 295, the project involves a new interchange at Hanover Road, a range of improvements to Hanover Road, and direct access ramps connecting Stoney Run Road and MD 170.

Alternatives considered include the following:

- Alternative 1 – No-Build
- Alternative 3 – MD 295 widening, compressed diamond interchange, and Hanover Road improvements on the existing alignment
- Alternative 3A – MD 295 widening, compressed diamond interchange, and Hanover Road improvements on a relocated alignment
- Alternative 4 – MD 295 widening, single point urban interchange (SPUI), and Hanover Road improvements on the existing alignment
- Alternative 4A – MD 295 widening, SPUI, and Hanover Road improvements on a relocated alignment
- Alternative 7 – MD 295 widening, loop ramp, and Hanover Road improvements on a relocated alignment
- Alternative 8 – MD 295 widening, diverging diamond interchange, and Hanover Road improvements on a relocated alignment

E. Summary of Environmental Impacts

Table S-1 contains a comparative summary of impacts associated with the No-Build and each of the six build alternatives. These impacts are briefly described below.

- The build alternatives would have no impact on public utilities, schools, churches, or health care facilities.
- A maximum of three to four residential displacements would occur with each build alternative.
- A maximum of 15 Maryland Aviation Administration (MAA) parcels would be affected, requiring 12.1 to 15.7 acres of right-of-way, depending on the build alternative.
- The build alternatives may increase traffic on Hanover Road, but would improve traffic flow in the community of Hanover.
- The project would improve the level of service of MD 295 and enhance access to and regional connectivity with BWI.
- Direct impacts to an undeveloped portion of Patapsco Valley State Park would range from 2.85 to 3.23 acres among the build alternatives.
- The direct access ramps between Stoney Run Road and MD 170 would impact approximately 0.15 acre of the BWI Trail.
- There are no historic standing structures affected by the build alternatives.
- The build alternatives may impact one or more potential archeological resource sites.

- The build alternatives would directly impact varying amounts of wetlands, waterways, floodplains, and hydric and farmland soils.
- The build alternatives would result in approximately 27.6 acres to 30.7 acres of new impervious surfaces.
- There are 30 sites with potential for hazardous materials that could be affected by the build alternatives. Depending on the area required for acquisition, further investigations of some or all of these sites could be required and would be conducted prior to acquisition.
- The State/National Ambient Air Quality Standards would not be exceeded by the build alternatives.
- Some noise sensitive areas would experience build year noise levels equal to or exceeding noise abatement criteria as a result of the build alternatives.
- The project would have no secondary and no major cumulative effects on socio-economic, cultural, or natural environmental resources.

Table S-1. Summary of Impacts.

| RESOURCES | Alternative | | | | | | |
|--|-------------|---|--|---|--|---|---|
| | 1 | 3 | 3A | 4 | 4A | 7 | 8 |
| | No-Build | Compressed Diamond w/ Existing Hanover Road Alignment | Compressed Diamond w/ Relocated Hanover Road Alignment | SPUI w/ Existing Hanover Road Alignment | SPUI w/ Relocated Hanover Road Alignment | Loop Ramp w/ Relocated Hanover Road Alignment | Diverging Diamond w/ Relocated Hanover Road Alignment |
| Socio-Economic Environment | | | | | | | |
| 1. Displacements | | | | | | | |
| a. Residential (No.) | 0 | 4 | 3 | 4 | 3 | 3 | 3 |
| b. Business/Commercial (No.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. Properties/Resources Affected | | | | | | | |
| a. Residential (No.) | 0 | 11 | 9 | 10 | 9 | 8 | 9 |
| b. MAA-owned Parcels (No.) | 0 | 15 | 14 | 15 | 14 | 14 | 14 |
| c. Other Business/Commercial (No.) | 0 | 23 | 23 | 23 | 24 | 22 | 25 |
| d. Religious Facility/School (No.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| e. Parkland/Recreation Areas (No.) | 0 | 2 | 2 | 2 | 2 | 2 | 2 |
| f. Historical/Archeological (No.) | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| 3. Right-of-Way Required | | | | | | | |
| a. Residential (Acres) | 0 | 13.20 | 13.80 | 12.81 | 13.84 | 11.98 | 13.62 |
| b. MAA-owned Parcels (Acres) | 0 | 12.42 | 15.40 | 12.42 | 15.45 | 15.95 | 15.45 |
| c. Other Business/Commercial (Acres) | 0 | 34.41 | 31.60 | 34.42 | 33.52 | 36.97 | 31.29 |
| d. Religious Facility/School (Acres) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| e. Parkland/Rec Area (Acres) | 0 | 2.97 | 2.86 | 3.23 | 2.90 | 2.85 | 2.97 |
| Total Right-of-way Required (Acres) | 0 | 63.00 | 63.66 | 62.88 | 65.71 | 67.75 | 63.33 |
| Natural Environment | | | | | | | |
| 1. Prime Farmland Soils (Acres) | 0.00 | 9.58 | 11.29 | 9.86 | 12.12 | 12.44 | 9.04 |
| 2. Wetlands (Acres) | 0.00 | 3.68 | 4.05 | 3.72 | 4.12 | 3.64 | 4.25 |
| 3. Stream (Linear feet) ¹ | 0 | 14,986 | 14,250 | 15,050 | 14,436 | 12,850 | 13,315 |
| 4. Impervious Surface (Acres) | 0.0 | 27.6 | 29.6 | 28.8 | 30.7 | 29.4 | 29.0 |
| 5. 100-yr Floodplain (Acres) | 0.00 | 6.15 | 6.64 | 6.42 | 6.96 | 8.41 | 6.96 |
| 6. Forest (Acres) | 0.00 | 36.66 | 34.23 | 37.49 | 34.47 | 33.20 | 33.41 |
| Cost Estimates | | | | | | | |
| Construction (millions of dollars) | 0 | \$166-\$176 | \$178-\$188 | \$171-\$181 | \$185-\$195 | \$185-\$195 | \$187-\$197 |

¹ Total stream impacts include all perennial, intermittent, and ephemeral channels, and unclassified culverts.

ENVIRONMENTAL ASSESSMENT FORM

The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with the provisions of 1500.4(k) and 1506.2 and 1506.6 of the Council of Environmental Quality Regulations, effective July 31, 1979, which recommend that federal, state and local procedures be integrated into a single process to reduce duplication.

The checklist identifies specific areas of the natural and social-economic environment that have been considered while preparing this Environmental Assessment (EA). The reviewer can refer to the appropriate section of the document, as indicated in the “Comment” column of the form, for a description of specific characteristics of the natural or social-economic environment within the proposed project area. It will also highlight any potential impacts, beneficial or adverse, that the action may incur. The “No” column indicates that during the scoping and early coordination processes, a specific area of the environment was not identified to be within the project area or would not be impacted by the proposed action.

**Improvements to MD 295 (Baltimore Washington Parkway) from
MD 100 to I-195, and Hanover Road from High Tech Drive in Howard County to MD 170
(Aviation Boulevard) in Anne Arundel County
Project # AA372A11**

| ENVIRONMENTAL ASSESSMENT FORM | | Yes | No | Comments |
|-----------------------------------|---|-------------|-------------|------------------------|
| A. Land Use Considerations | | | | |
| 1. | Will the action be within the 100-year flood plain? | <u>X</u> | <u> </u> | See Section III.E.3. |
| 2. | Will the action require a permit for construction or alteration within the 50-year flood plain? | <u> </u> | <u>X</u> | |
| 3. | Will the action require a permit for dredging, filling, draining or alteration of a wetland? | <u>X</u> | <u> </u> | See Section III.E.2.c. |
| 4. | Will the action require a permit for the construction or operation of facilities for solid waste disposal, including dredge and excavation spoil? | <u> </u> | <u>X</u> | |
| 5. | Will the action occur on slopes exceeding 15%? | <u> </u> | <u>X</u> | |
| 6. | Will the action require a grading plan or a sediment control permit? | <u>X</u> | <u> </u> | See Section III.E.1. |
| 7. | Will the action require a mining permit for deep or surface mining? | <u> </u> | <u>X</u> | |
| 8. | Will the action require a permit for drilling a gas or oil well? | <u> </u> | <u>X</u> | |
| 9. | Will the action require a permit for airport construction? | <u> </u> | <u>X</u> | |
| 10. | Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices? | <u> </u> | <u>X</u> | |
| 11. | Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland? | <u>X</u> | <u> </u> | See Section III.A.6.e |
| 12. | Will the action affect the use of any natural or manmade features that are unique to the county, state, or nation? | <u> </u> | <u>X</u> | |
| 13. | Will the action affect the use of an archeological or historical site or structure? | <u>X</u> | <u> </u> | See Section III.D. |

| ENVIRONMENTAL ASSESSMENT FORM | Yes | No | Comments |
|--|---------------|---------------|----------------------|
| B. Water Use Considerations | | | |
| 14. Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water? | <u>X</u> | <u> </u> | See Section III.E.2. |
| 15. Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction? | <u> </u> | <u>X</u> | |
| 16. Will the action change the overland flow of storm water or reduce the absorption capacity of the ground? | <u>X</u> | <u> </u> | See Section III.E.2. |
| 17. Will the action require a permit for the drilling of a water well? | <u> </u> | <u>X</u> | |
| 18. Will the action require a permit for water appropriation? | <u> </u> | <u>X</u> | |
| 19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water? | <u> </u> | <u>X</u> | |
| 20. Will the action require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives? | <u> </u> | <u>X</u> | |
| 21. Will the action result in any discharge into surface or sub-surface water? | <u>X</u> | <u> </u> | See Section III.E.2. |
| 22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit? | <u> </u> | <u>X</u> | |
| C. Air Use Considerations | | | |
| 23. Will the action result in any discharge into the air? | <u>X</u> | <u> </u> | See Section III.F. |
| 24. If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor? | <u> </u> | <u>X</u> | |
| 25. Will the action generate additional noise, which differs in character or level from present conditions? | <u>X</u> | <u> </u> | See Section III.G. |
| 26. Will the action preclude future use of related air space? | <u> </u> | <u>X</u> | |
| 27. Will the action generate any radiological, electrical, magnetic, or light influences? | <u> </u> | <u>X</u> | |

| ENVIRONMENTAL ASSESSMENT FORM | Yes | No | Comments |
|--|---------------|---------------|---|
| D. Plants and Animals | | | |
| 28. Will the action cause the disturbance, reduction, or loss of any rare, unique or valuable plant or animal? | <u>X</u> | <u> </u> | See Section III.E.4 and 5. |
| 29. Will the action result in the significant reduction or loss of any fish or wildlife habitats? | <u> </u> | <u>X</u> | |
| 30. Will the action require a permit for the use of pesticides, herbicides or other biological, chemical, or radiological control agents? | <u> </u> | <u>X</u> | |
| E. Socio-Economic | | | |
| 31. Will the action result in a preemption or division of properties or impair their economic use? | <u>X</u> | <u> </u> | See Section III.A.4.b. |
| 32. Will the action cause relocation of activities, structures, or result in a change in the population density or distribution? | <u>X</u> | <u> </u> | See Section III.A.4.b. and Section III.C.1. |
| 33. Will the action alter land values? | <u> </u> | <u>X</u> | |
| 34. Will the action affect traffic flow and volume? | <u>X</u> | <u> </u> | See Section I.C and Section III.G. |
| 35. Will the action affect the production, extraction, harvest, or potential use of a scarce or economically important resource? | <u> </u> | <u>X</u> | |
| 36. Will the action require a license to construct a sawmill or other plant for the manufacture of forest products? | <u> </u> | <u>X</u> | |
| 37. Is the action in accord with federal, state, regional, and local comprehensive or functional plans, including zoning? | <u>X</u> | <u> </u> | See Section III.C.2. |
| 38. Will the action affect the employment opportunities for persons in the area? | <u> </u> | <u>X</u> | See Section III.B.2 and III.B.3. |
| 39. Will the action affect the ability of the area to attract new sources of tax revenue? | <u>X</u> | <u> </u> | See Section III.B and III.C.1. |
| 40. Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocation elsewhere? | <u> </u> | <u>X</u> | |

| ENVIRONMENTAL ASSESSMENT FORM | Yes | No | Comments |
|--|----------|----------|------------------------------|
| 41. Will the action affect the ability of the area to attract tourism? | ___ | <u>X</u> | |
| E. Other Considerations | | | |
| 42. Could the action endanger public health, safety, or welfare? | ___ | <u>X</u> | |
| 43. Could the action be eliminated without deleterious affects to the public health, safety, welfare, or the natural environment? | ___ | <u>X</u> | |
| 44. Will the action be of statewide significance? | ___ | <u>X</u> | |
| 45. Are there any other plans or actions (federal, state, county, or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on public health, safety, welfare, or environment? | ___ | <u>X</u> | See Section III.I. |
| 46. Will the action require additional power generation or transmission capacity? | ___ | <u>X</u> | |
| 47. This agency will develop a complete environmental affects report on the proposed action. | <u>X</u> | ___ | See Environmental Assessment |

Table of Contents

TABLE OF CONTENTS

| | |
|---|--------|
| SUMMARY | S-1 |
| A. Administrative Action | S-1 |
| B. Additional Information | S-1 |
| C. Description of Proposed Action/Purpose and Need | S-1 |
| D. Alternatives Considered..... | S-2 |
| E. Summary of Environmental Impacts..... | S-2 |
| ENVIRONMENTAL ASSESSMENT FORM..... | S-5 |
| TABLE OF CONTENTS | i |
| LIST OF ACRONYMS | iv |
| I. PURPOSE AND NEED..... | I-1 |
| A. Project Location and Description | I-1 |
| B. Purpose of the Project | I-1 |
| C. Need for the Project..... | I-1 |
| II. ALTERNATIVES CONSIDERED..... | II-1 |
| A. Alternatives Presented to the Public at the Alternatives Workshop..... | II-1 |
| B. Alternatives Retained for Detailed Study | II-2 |
| III. EXISTING ENVIRONMENT AND IMPACTS | III-1 |
| A. Social Characteristics | III-1 |
| 1. Population and Housing..... | III-1 |
| 2. Environmental Justice..... | III-3 |
| 3. Public Participation..... | III-7 |
| 4. Neighborhoods/Communities..... | III-7 |
| 5. Effects on Aesthetics and Visual Quality | III-10 |
| 6. Community Facilities and Services | III-10 |
| B. Economic Environment | III-19 |
| 1. Employment Characteristics | III-19 |
| 2. Effects on Regional Employment Characteristics | III-20 |
| 3. Effects on Local Employment Characteristics | III-20 |
| 4. Tax Base..... | III-21 |
| C. Land Use | III-21 |
| 1. Existing and Future Land Use | III-21 |
| 2. Effects on Land Use..... | III-21 |
| 3. Compliance with Smart Growth Initiatives | III-24 |
| D. Cultural Resources..... | III-24 |
| 1. Historic Standing Structures | III-24 |
| 2. Archeological Resources..... | III-25 |
| E. Natural Environment | III-25 |
| 1. Topography, Geology, and Soils | III-25 |
| 2. Aquatic Resources | III-26 |
| 3. Floodplains..... | III-35 |
| 4. Vegetation and Wildlife..... | III-36 |
| 5. Rare, Threatened, and Endangered Species | III-38 |
| F. Air Quality | III-39 |
| 1. Carbon Monoxide Micro-scale Evaluation | III-39 |
| 2. PM _{2.5} Regional and Hot-Spot Conformity Determination..... | III-40 |

| | |
|---|--------|
| 3. Mobile Source Air Toxics Analysis | III-41 |
| G. Noise | III-45 |
| 1. Noise Abatement Criteria and Noise Sensitive Areas | III-45 |
| 2. Evaluation Methodology and Impact Analysis | III-46 |
| 3. Results | III-47 |
| 4. Mitigation Summary | III-48 |
| H. Hazardous Materials | III-49 |
| 1. Impacts and Minimization/Mitigation | III-49 |
| I. Indirect and Cumulative Effects (ICE) Analysis | III-49 |
| 1. ICE Analysis Objective and Scoping | III-49 |
| 2. Analysis | III-59 |
| J. Wild and Scenic Rivers | III-67 |
| K. Coastal Zone Management | III-67 |
| L. Children's Environmental Health and Safety Risks | III-68 |
| M. Light Emissions and Visual Impacts | III-68 |
| N. Construction | III-68 |
| O. Natural Resources and Energy Supply | III-69 |
| P. Pollution Prevention, and Solid Waste | III-69 |
| IV. COMMENTS AND COORDINATION | IV-1 |
| A. Streamlined Process Coordination | IV-1 |
| 1. Purpose and Need | IV-1 |
| 2. Alternatives Retained for Detailed Study | IV-1 |
| 3. Regulatory Agency Coordination | IV-2 |
| 4. Streamlined Process Meeting Minutes | IV-3 |
| B. Elected Officials Correspondence | IV-3 |
| C. Public Coordination/Comments | IV-3 |
| 1. Stakeholders Group | IV-3 |
| 2. Public Workshop | IV-5 |
| 3. Other Outreach | IV-5 |
| D. Release of Airport Real Property | IV-6 |
| 1. Cultural Resources | IV-15 |
| 2. Natural Resources | IV-15 |
| V. REFERENCES | V-1 |

APPENDIX A: Uniform Relocation Assistance Act

APPENDIX B: Comments and Coordination Letters

LIST OF FIGURES:

| | |
|------------------------------------|-------|
| Figure I.1. Regional Map | I-2 |
| Figure II.1. MD 295 Widening | II-4 |
| Figure II.2. Alternative 3 | II-6 |
| Figure II.3. Alternative 3A | II-7 |
| Figure II.4. Alternative 4 | II-8 |
| Figure II.5. Alternative 4A | II-9 |
| Figure II.6. Alternative 7 | II-10 |

| | |
|--|--------|
| Figure II.7. Alternative 8 | II-11 |
| Figure II.8. Hanover Road East | II-12 |
| Figure III.1. Census Tract Map..... | III-2 |
| Figure III.2. Community Resources..... | III-11 |
| Figure III.3. Transportation Facilities Map | III-12 |
| Figure III.4. Existing Land Use Map | III-22 |
| Figure III.5. Future Land Use | III-23 |
| Figure III.6. Wellhead Protection Area and 100-Year Floodplains | III-28 |
| Figure III.7. Specimen Trees | III-37 |
| Figure III.8. ICE Boundary | III-51 |
| Figure III.9. 1973 Land Use | III-55 |
| Figure III.10. 2002 Land Use | III-57 |
| Figure III.11. Existing Land Use and Future Developments – Residential Properties | III-60 |
| Figure III.12. Existing Land Use and Future Developments – Commercial Properties | III-61 |
| Figure III.13. Existing Land Use & Future Development – Largest Projects in ICE Analysis Boundary..... | III-62 |
| Figure IV.1. MAA-owned parcels affected by Alternative 3 | IV-7 |
| Figure IV.2. MAA-owned parcels affected by Alternative 3A | IV-8 |
| Figure IV.3. MAA-owned parcels affected by Alternative 4 | IV-9 |
| Figure IV.4. MAA-owned parcels affected by Alternative 4A | IV-10 |
| Figure IV.5. MAA-owned parcels affected by Alternative 7 | IV-11 |
| Figure IV.6. MAA-owned parcels affected by Alternative 8 | IV-12 |
| Figure IV.7. MAA-owned parcels east of Old Stoney Run Road Affected by all the Build Alternatives | IV-13 |

LIST OF TABLES:

| | |
|---|--------|
| Table S-1. Summary of Impacts. | 4 |
| Table III-1: Population Characteristics, 2000..... | III-3 |
| Table III-2: Housing Characteristics..... | III-3 |
| Table III-3: Racial and Ethnic Makeup of the Census Tract Block Group (BG) Populations (2000)..... | III-6 |
| Table III-4: Displacement/Right-of-Way Impacts by Alternative..... | III-9 |
| Table III-5: Driveway Impacts. | III-9 |
| Table III-6: Impacts to Patapsco Valley State Park..... | III-15 |
| Table III-7: Employment Characteristics | III-19 |
| Table III-8: Potential Impacts (acres) to Hydric, Highly Erodible, and Farmland Soils. | III-26 |
| Table III-9: Potential Impacts (acres) to Delineated Wetlands. | III-31 |
| Table III-10: Potential Impacts (linear feet) to Delineated Waterways | III-32 |
| Table III-11: Potential Impacts (acres) to 100-Year Floodplains. | III-36 |
| Table III-12. List of Plant Species and Their Status | III-38 |
| Table III-13: Percent of Diesel Powered Traffic and Average Annual Daily Traffic (AADT) for the Existing (2004), Year 2030 No-Build, and Year 2030 Build conditions on the MD 295 Mainline between MD 100 and I-195 and Hanover Road..... | III-41 |
| Table III-14: FHWA Noise Abatement Criteria | III-45 |
| Table III-15: Monitored Noise Levels | III-46 |
| Table III-16: Predicted Design Year Noise Levels..... | III-47 |

| | |
|--|--------|
| Table III-17: Summary of Potential ICE Resources | III-50 |
| Table III-18: Population within Anne Arundel, Howard, and Balt. Counties, 1930-2000 | III-50 |
| Table III-19: ICE Analysis Study Area Land Use/Land Cover, 1973 – 2002..... | III-54 |
| Table III-20: Largest Anticipated Developments Within or Near the ICE Study Area..... | III-58 |
| Table IV-1: Purpose and Need Coordination | IV-1 |
| Table IV-2: Alternatives Retained for Detailed Study Coordination | IV-2 |
| Table IV-3: Agency Correspondence..... | IV-2 |
| Table IV-4: Streamlined Process Meeting Minutes..... | IV-3 |
| Table IV-5: Stakeholders..... | IV-4 |
| Table IV-6: MAA Parcels Affected by the MD 295 Project..... | IV-14 |
| Table IV-7: Wetland Impacts by MAA Parcel Number and Build Alternative | IV-18 |
| Table IV-8: Waterway Impacts by MAA Parcel Number and Build Alternative | IV-19 |
| Table IV-9: Impacts to Highly Erodible Soils by MAA Parcel Number and Alternative | IV-19 |
| Table IV-10: Impacts to Farmland Soils of Statewide Importance by MAA Parcel Number and Alternative | IV-20 |
| Table IV-11: Forest Impacts by MAA Parcel Number and Build Alternative..... | IV-20 |

LIST OF ACRONYMS

| | |
|-----------------|---|
| AACC | Anne Arundel Community College |
| ANZ | Airport Noise Zone |
| ATI | Area of Traffic Influence |
| BMC | Baltimore Metropolitan Council |
| BMP | Best Management Practice |
| BWI | Baltimore/Washington International Thurgood Marshall Airport |
| CAAA | Clean Air Act Amendments |
| CERCLA | Comprehensive Environmental Response Compensation and Liability Act |
| CERCLIS | Comprehensive Environmental Response Compensation and Liability Information System |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| COR | Corrective Action Site |
| CTP | Consolidated Transportation Program |
| dBA | A-weighted decibel scale |
| DHHS | Department of Health and Human Services |
| DNL | Day-night average sound level |
| DOI | U.S. Department of the Interior |
| EJ | Environmental Justice |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| ERNS | Emergency Response Notification System |
| FAA | Federal Aviation Administration |
| FCA | Maryland Forest Conservation Act |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FINDS | Facility Index System |
| GIS | Geographic Information System |
| HLUST | Historic Leaking Underground Storage Tank |
| H-UST/HUST | Historic Leaking Underground Storage Tank |
| L _{eq} | A-weighted equivalent sound level |
| LEP | Limited English Proficiency |
| LOS | Level of service |
| LUST | Leaking Underground Storage Tank |
| LWCFA | Land and Water Conservation Fund Act |
| LQG | Large Quantity Generator |
| MAA | Maryland Aviation Administration |
| MARC | Maryland Rail Commuter Services |
| MBSS | Maryland Biological Stream Survey |
| MD DNR | Maryland Department of Natural Resources |
| MDE | Maryland Department of the Environment |
| MDOT | Maryland Department of Transportation |
| MDP | Maryland Department of Planning |
| MHT | Maryland Historical Trust |
| MITAGS | Maritime Institute of Technology & Graduate Studies |

| | |
|-------------------|--|
| MOT | Maintenance of Traffic |
| MSATs | Mobile Source Air Toxics |
| MTA | Maryland Transit Administration |
| NAAQS | National Ambient Air Quality Standards |
| NAC | Noise Abatement Criteria |
| NAVAID | Navigational Aid |
| NEPA | National Environmental Policy Act |
| NLEV | National low emission vehicle |
| NPL | National Priority List |
| NRHP | National Register of Historic Places |
| NSA | Noise Sensitive Area |
| OCPCASES | Oil Production Control Cases |
| PFA | Priority Funding Areas |
| PM _{2.5} | Particulate matter of 2.5 micrometers or smaller in size |
| ppm | Parts per million |
| RCRA | Resource Conservation and Recovery Act |
| ROW | Right-of-way |
| SCEA | Secondary and Cumulative Effects Analysis |
| SHA | Maryland State Highway Administration |
| SIP | State Implementation Plan |
| SPUI | Single point urban interchange |
| SQG | Small Quantity Generator |
| TAZ | Traffic Analysis Zone |
| TIP | Transportation Improvement Plan |
| TMDL | Total maximum daily load |
| TNM | Traffic Noise Model |
| USDOT | United States Department of Transportation |
| USFWS | U.S. Fish and Wildlife Service |
| UST | Underground Storage Tank |
| VMT | Vehicle miles traveled |
| WUS | “Waters of the U. S.” |

Purpose and Need

I. PURPOSE AND NEED

A. Project Location and Description

The Maryland State Highway Administration (SHA) is studying improvements to MD 295 from MD 100 north to I-195, a distance of approximately three miles (Figure I.1). The study also includes a new grade-separated interchange at Hanover Road and a range of improvements along Hanover Road from High Tech Drive east to MD 170 (Aviation Boulevard), a distance of approximately 1.5 miles. Ninety percent of the project area is in northeastern Anne Arundel County, while the remaining western-most 10 percent is in Howard County.

The proposed project would widen MD 295 from a four-lane roadway (two through lanes in each direction) to a six-lane roadway with three through lanes in each direction. The additional width would include a 12-foot travel lane with a 10-foot shoulder constructed within the median of MD 295 in each direction, from south of the MD 100 interchange to north of the I-195 interchange. The northern limit of the MD 295 widening would tie into another MD 295 project from I-195 to just south of I-695.

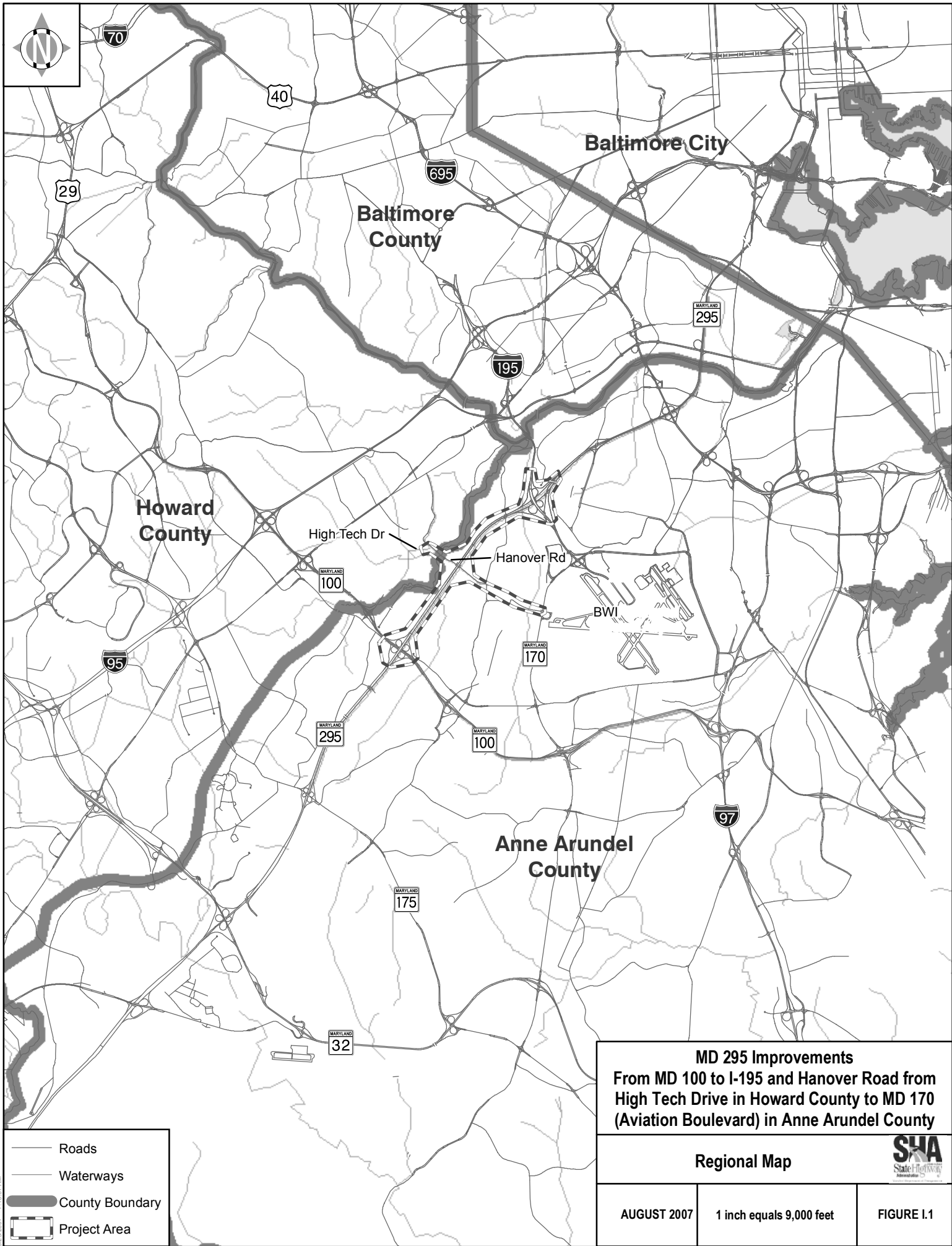
The proposed project would create a new MD 295 interchange at Hanover Road and upgrade Hanover Road to a four-lane divided roadway. The upgrade would begin at High Tech Drive (a two-lane roadway) at its intersection with Hanover Road. From High Tech Drive, Hanover Road would be straightened and widened into a four-lane divided roadway up to its terminus at Ridge Road. The project would extend Hanover Road eastward beyond Ridge Road to Old Stoney Run Road, ultimately connecting it with MD 170 (Aviation Boulevard) at the easternmost end of the study area. Other proposed improvements along Hanover Road include a 20-foot median, a 12-foot inside lane, a 16-foot outside lane to accommodate bicyclists, and five-foot sidewalks on both sides of the roadway.

B. Purpose of the Project

The purpose of the project is to improve the existing capacity, traffic operations, and safety of MD 295, and to enhance Hanover Road as a secondary access to the Baltimore/Washington International Thurgood Marshall Airport (BWI) and surrounding areas. Currently I-195 serves as the primary access to BWI and related service areas. By improving MD 295 and Hanover Road, the project will improve connectivity between the Baltimore and Washington metropolitan regions as it relates to BWI and will support existing and planned economic development in and around BWI.

C. Need for the Project

The need for improvements in the study area is due to rapid growth and high traffic volumes in one of the fastest growing areas of Anne Arundel County. Large developments such as Arundel Mills Mall and the BWI Business District have all contributed to increased traffic volumes in the area. BWI is a major facilitator of economic growth, not only in the immediate area but in the entire Baltimore-Washington D.C. metropolitan region. BWI serves the fourth largest consumer population and travel market in the United States. Over the past fifteen years, passenger volume has more than doubled and is forecast to continue to grow according to the Coordinated Transportation Vision for the BWI Region. The BWI Business District is also expected to grow dramatically.



Map Document: (X:\Projects\882C Mapping EA\Fig_1 Reg\Map.mxd)
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| | | |
|---|---------------------------------|-------------------|
| MD 295 Improvements From MD 100 to I-195 and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County | | |
| Regional Map | | |
| AUGUST 2007 | 1 inch equals 9,000 feet | FIGURE I.1 |



Recent BWI service expansion has begun to use Stoney Run Road for service support operations. One example of this is a recently built consolidated rental car facility. In addition, state government services such as the Maryland Department of Transportation (MDOT) and Maryland Aviation Administration (MAA) have expanded their facilities in the area. Due to the expansion of private and government facilities in the area, a heavier traffic demand will be placed on MD 295, as well as Hanover Road, which is a major cross road to Stoney Run Road. Both the expansion of MD 295 to six lanes and the provision of a new interchange at Hanover Road were identified in the 2004 Highway Needs Inventory and identified as a priority by Anne Arundel County in its 2003 and 2005 priority letters.

MD 295, also known as the Baltimore Washington Parkway, is classified as an urban freeway/expressway with full access control (a limited access four-lane divided freeway). The freeway is a major north-south route between the Baltimore and Washington D.C. metropolitan regions. MD 295 is also a major access connector to BWI from both the Baltimore and Washington D.C. metropolitan regions. Hanover Road is classified as a two-lane, undivided minor arterial that provides service to both airport-related and local traffic.

BWI has completed its \$1.8 billion expansion program and conditionally approved Federal Aviation Administration (FAA) forecasts show approximately 33 million annual passengers being served by BWI by the year 2020. BWI currently serves approximately 20 million annual passengers and generates over 60,000 vehicle trips per day in the terminal core area alone. It is estimated that BWI expansion and related development may generate in excess of two million vehicle miles of travel per day in the surrounding area. Recent growth has already caused certain roadways to operate at near capacity conditions.

At the request of MDOT, SHA performed a traffic study to assess both short and long term growth on the roadway network around BWI. The analysis revealed that many intersections in the area would fail based on travel demand forecasts for the year 2025. The study findings and recommendations were consistent with the Baltimore Regional Transportation Board's long range plan for roadway improvements in the study area. The BWI Coordination Committee suggested additional improvements based on the traffic study. Among the recommended improvements are the expansion of MD 295 from two lanes to three lanes in both directions from MD 100 north to I-695, a new interchange at Hanover Road, and reconstruction and widening of Hanover Road from High Tech Drive east to MD 170.

The MDOT Secretary officially announced funding for the MD 295 planning study on November 18, 2004, and the planning phase began in January 2005. Since then, multiple meetings have been held with stakeholders, and a public workshop was held in January 2006.

Alternatives Considered

II. ALTERNATIVES CONSIDERED

A. Alternatives Presented to the Public at the Alternatives Workshop

SHA considered a full range of alternatives during the initial planning stages of the project. At the January 22, 2006 Alternatives Public Workshop, six build alternatives and the No-Build Alternative were presented to the public. Three build alternatives (Alternatives 3, 4 and 7) and the No-Build Alternative were retained for detailed study, and three build alternatives (Alternatives 2, 5 and 6) were dropped from further consideration. Subsequent to the Alternatives Public Workshop, three additional alternatives were developed (Alternatives 3A, 4A and 8), as well as direct access ramps from southbound MD 170 onto Stoney Run Road and from Stoney Run Road to southbound MD 170. The direct access ramps were incorporated at the request of several team members, including the MAA. The ramps will be needed in the near future to alleviate traffic congestion. Additional growth in the area and lack of alternate access to destinations off and near the intersection will cause the intersection to fail within the next five years. An analysis of the feasibility of including the direct access ramps as part of the study was distributed to the MD 295 Interagency Group on April 24, 2007 (Appendix B, page 65).

All of the build alternatives include the widening of MD 295 as well as improvements along Hanover Road. The existing MD 295 mainline would be widened to six lanes along the inside of the roadway from south of the MD 100 interchange to north of the I-195 interchange. A 12-foot lane and a 10-foot shoulder would be added to the inside of the existing roadway, providing three 12-foot lanes, a 10-foot inside shoulder and a 12-foot outside shoulder in each direction. Hanover Road would be upgraded to a four lane roadway (two lanes in each direction), 12-foot inside lanes and 16-foot outside lanes to accommodate bicyclists. It would include a 20-foot median, a 10-foot hiker biker trail on the north side and a five-foot sidewalk on the south side between High Tech Drive in Howard County and Corporate Center Drive in Anne Arundel County. Hanover Road would also be extended east beyond Corporate Center Drive / New Ridge Road as a four lane undivided roadway with a 10-foot hiker biker trail on the north side.

The build alternatives differ among the interchange proposed at MD 295 and Hanover Road as well as three different alternative alignments for Hanover Road. Alternatives 2, 3, 4, and 6 keep Hanover Road on its existing alignment. Alternatives 3A, 4A, 7 and 8 relocate Hanover Road approximately 200 feet south of the existing alignment whereas Alternative 5 relocates Hanover Road north of the existing alignment.

The description of the alternatives dropped from further consideration (Alternatives 2, 5 and 6) along with the reason they were dropped from further consideration are provided below.

Alternative 2: Partial Cloverleaf Interchange

Under this alternative a partial cloverleaf interchange would be built at MD 295 and Hanover Road. This interchange uses loop ramps to accommodate heavy movements onto MD 295. This enables major turning movements to be made by right turn entrances and exits. This alternative was originally developed to avoid what was thought to be parkland in the southwest quadrant.

The disadvantage of the partial cloverleaf interchange is that it requires relatively large areas of right-of-way (ROW). Moreover, investigations revealed that no parkland exists in the southwest quadrant.

Alternative 5: North Alignment of Hanover Road with Compressed Diamond Interchange

Under this alternative a compressed diamond interchange would be built at MD 295 and Hanover Road. This alternative would relocate Hanover Road to the north of the existing alignment. Similar to alternative 2, this alternative was originally developed to avoid what was thought to be parkland in the southwest quadrant.

The disadvantages of Alternative 5 include the potential for future queuing between signals and it presents the highest impacts to natural resources on the northwest quadrant of any of the proposed interchanges. Moreover, preliminary investigations revealed that no parkland existed in the southwest quadrant, and the Stakeholder's Group expressed little support for the alternative.

Alternative 6: Extended Loop and Half Diamond Interchange

Alternative 6 was developed in response to the new park boundary and wetlands in the vicinity of the proposed interchange. This interchange provides no ramps on the northwestern quadrant of the interchange to minimize impacts to the park and wetlands as well as the residential area also in that quadrant. A loop ramp is introduced on the southwestern quadrant of the interchange to allow movements to and from southbound MD 295. The loop ramp was designed in a horseshoe shape in order to avoid longitudinal impacts to a stream in the area. A one way directional ramp is proposed on the northeast and southeast quadrants to allow movements to and from northbound MD 295.

While this alternative would provide a secondary access to BWI, it would have relatively high impacts to residences and businesses. It also would require more ROW and higher construction costs than Alternatives 2 through 7.

Option 1: Hanover Road North Option

The Hanover Road North Option would follow the existing roadway alignment keeping the intersection of Hanover Road and Ridge Road at its current location. The alignment would extend eastward to merge into Old Stoney Run Road.

The North Option would have greater impacts to adjacent property owners than the Hanover Road South Option, and would require bifurcating a property east of Ridge Road. This option also would present potential access issues to existing businesses at the intersection of Hanover Road and Ridge Road. Finally, the existing alignment would keep the roadway close to the Maryland Aviation Administration (MAA) wetland mitigation site north of Hanover Road.

B. Alternatives Retained for Detailed Study**Alternative 1: No-Build**

The No-Build Alternative consists of routine maintenance and spot improvements to the existing roadways. Minor improvements would occur as part of normal maintenance and safety operations. The No-Build Alternative does not address the Purpose and Need for the project, it does serve as a baseline for comparing the impacts and benefits associated with the other build alternatives.

Alternative 3 – Compressed Diamond Interchange

Under this alternative a compressed diamond interchange would be built at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at signalized intersections on either side of MD 295 (Figures II.2 and II.8).

Alternative 3A – Compressed Diamond Interchange with relocated Hanover Road

Under this alternative Hanover Road would be relocated approximately 200 feet south of the existing alignment and a compressed diamond interchange would be built at MD 295 and relocated Hanover Road. Ramps to and from MD 295 would meet Hanover Road at signalized intersections on either side of MD 295.

Alternative 4 – Single Point Urban Interchange (SPUI)

Under this alternative a single point urban interchange (SPUI) would be built at MD 295 and Hanover Road (Figures II.4 and II.8). While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below or underneath the bridge, allowing opposing left turning movements to occur simultaneously.

Alternative 4A – Single Point Urban Interchange with relocated Hanover Road

Under this alternative Hanover Road would be relocated approximately 200 feet south of the existing alignment and a single point urban interchange (SPUI) would be built at MD 295 and relocated Hanover Road (Figures II.5 and II.8). While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below or underneath the bridge, allowing opposing left turning movements to occur simultaneously.

Alternative 7 – South Alignment of Hanover Road with Loop and Half Diamond Interchange

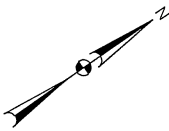
Under this alternative a loop ramp would be built in the southwestern quadrant of the interchange to allow movement from southbound MD 295 (Figures II.6 and II.8). One way directional ramps would be built on the northeast and southeast quadrants to allow movements to and from northbound MD 295. No ramps would be built in the northwestern quadrant of the interchange to avoid impacts to the parkland, wetlands as well as the residential area in the quadrant.

Alternative 8 – Diverging Diamond Interchange

Under this alternative a diverging diamond would be built at MD 295 and Hanover Road. The diverging diamond interchange switches traffic at the ramp terminals, over to the opposite side of the roadway within the interchange (Figures II.7 and II.8). This promotes left-turn movements and eliminates the left-turn signal phase improving the efficiency of the interchange. This traffic pattern improves capacity and minimizes the length of the queues which can normally cause failure within a diamond interchange.

Option 2 - Hanover Road South Option

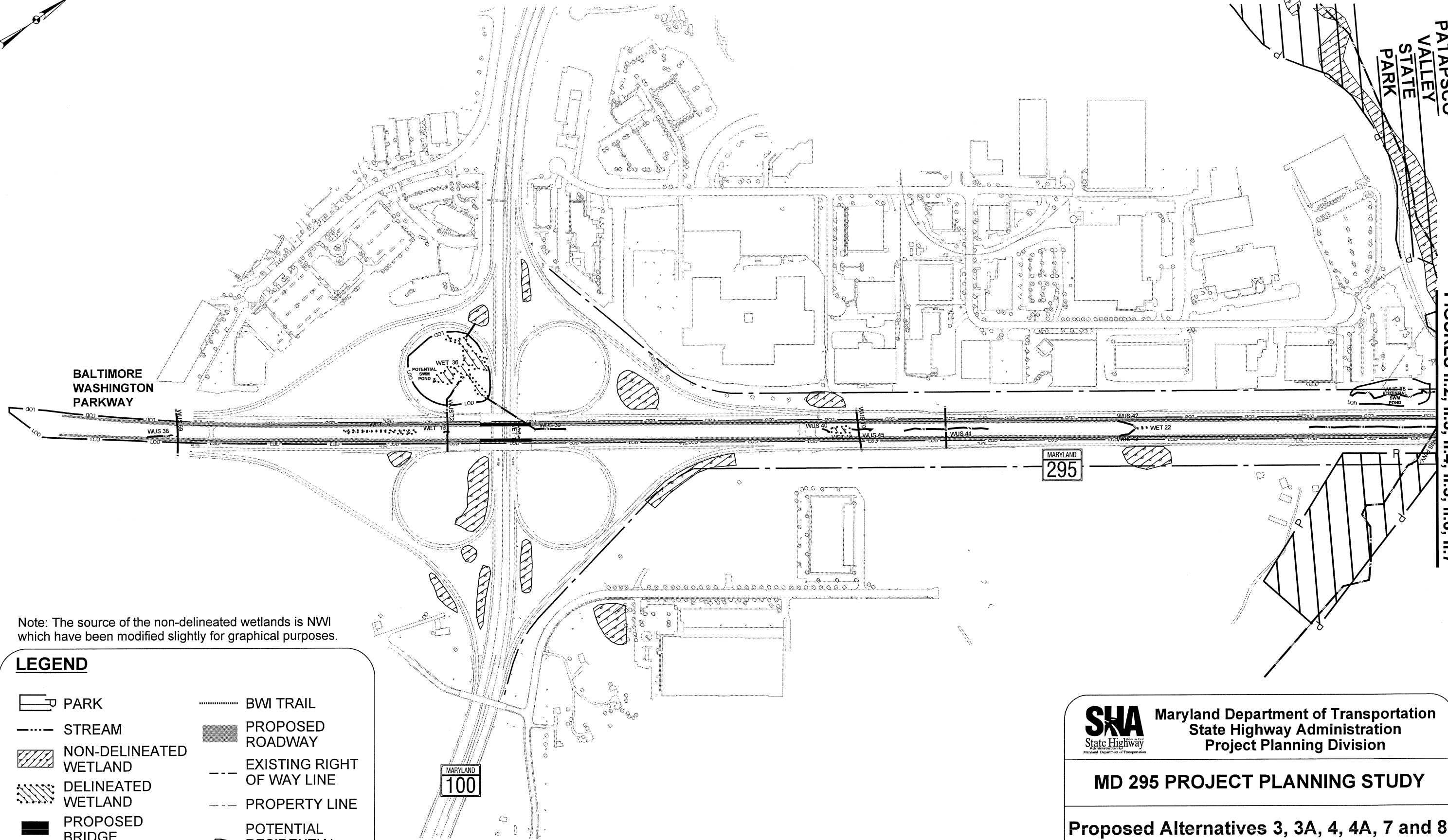
The Hanover Road South Option would minimize the number of curves by relocating the Hanover Road and Ridge Road intersection approximately 300 feet south of the existing location. This option was incorporated into the Hanover Road alignment for all of the alternatives retained for detailed study.



PATAPSCO
VALLEY
STATE
PARK

MATCH LINE SEE
FIGURES II.2, II.3, II.4, II.5, II.6, II.7

BALTIMORE
WASHINGTON
PARKWAY



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

- | | |
|------------------------|------------------------------------|
| PARK | BWI TRAIL |
| STREAM | PROPOSED ROADWAY |
| NON-DELINEATED WETLAND | EXISTING RIGHT OF WAY LINE |
| DELINEATED WETLAND | PROPERTY LINE |
| PROPOSED BRIDGE | POTENTIAL RESIDENTIAL DISPLACEMENT |
| LIMIT OF DISTURBANCE | |



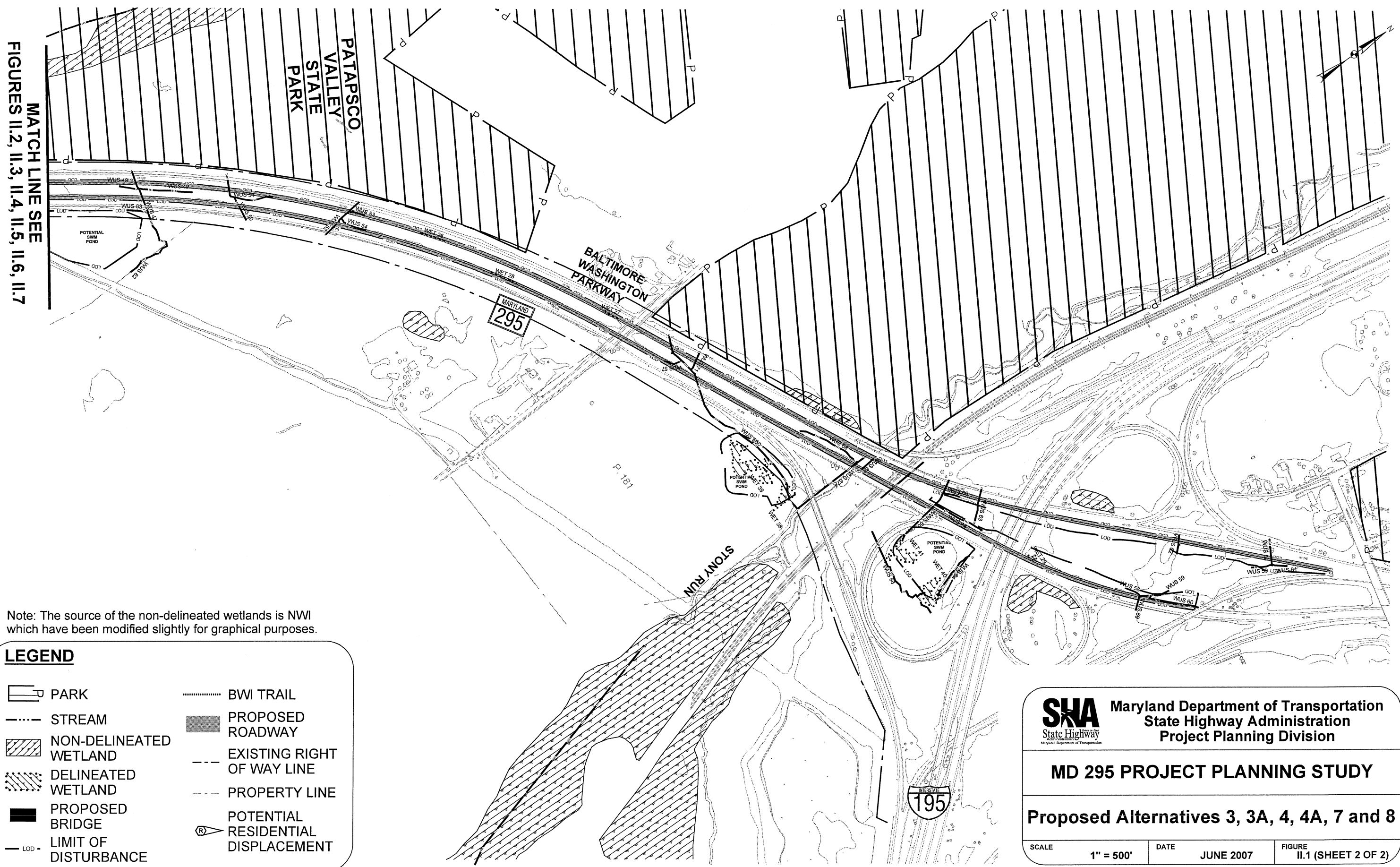
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Proposed Alternatives 3, 3A, 4, 4A, 7 and 8

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|-------|-----------|------|-----------|--------|---------------------|
| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.1 (SHEET 1 OF 2) |
|-------|-----------|------|-----------|--------|---------------------|


MATCH LINE SEE
FIGURES II.2, II.3, II.4, II.5, II.6, II.7



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

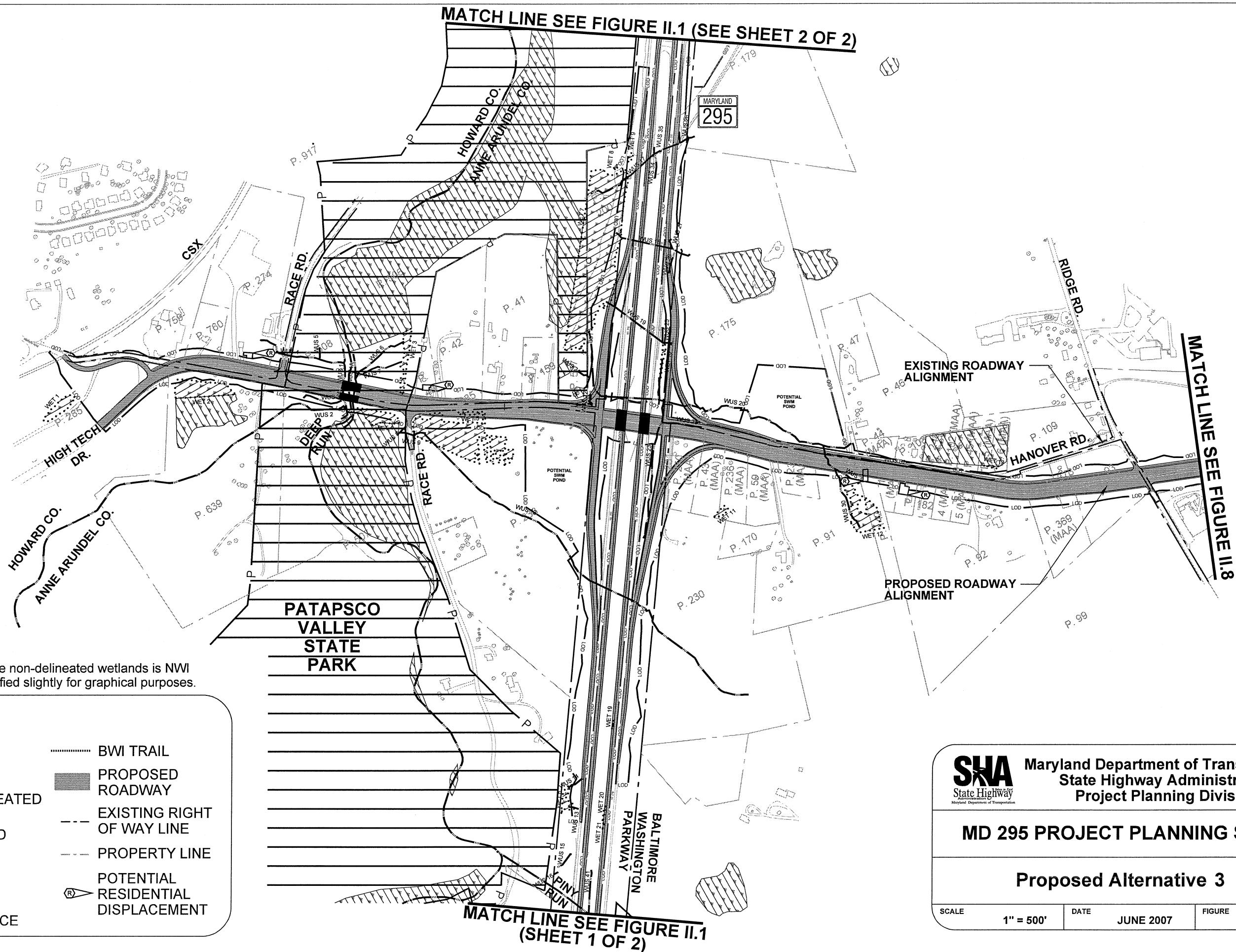
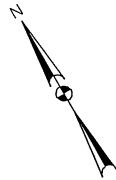
- PARK
- STREAM
- NON-DELINEATED WETLAND
- DELINEATED WETLAND
- PROPOSED BRIDGE
- LIMIT OF DISTURBANCE
- BWI TRAIL
- PROPOSED ROADWAY
- EXISTING RIGHT OF WAY LINE
- PROPERTY LINE
- POTENTIAL RESIDENTIAL DISPLACEMENT

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MD 295 PROJECT PLANNING STUDY

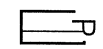

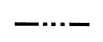

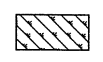

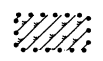



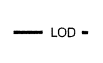
Proposed Alternatives 3, 3A, 4, 4A, 7 and 8

| | | | | | |
|-------|-----------|------|-----------|--------|---------------------|
| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.1 (SHEET 2 OF 2) |
|-------|-----------|------|-----------|--------|---------------------|



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

- | | |
|--|--|
|  PARK |  BWI TRAIL |
|  STREAM |  PROPOSED ROADWAY |
|  NON DELINEATED WETLAND |  EXISTING RIGHT OF WAY LINE |
|  DELINEATED WETLAND |  PROPERTY LINE |
|  PROPOSED BRIDGE |  POTENTIAL RESIDENTIAL DISPLACEMENT |
|  LIMIT OF DISTURBANCE | |

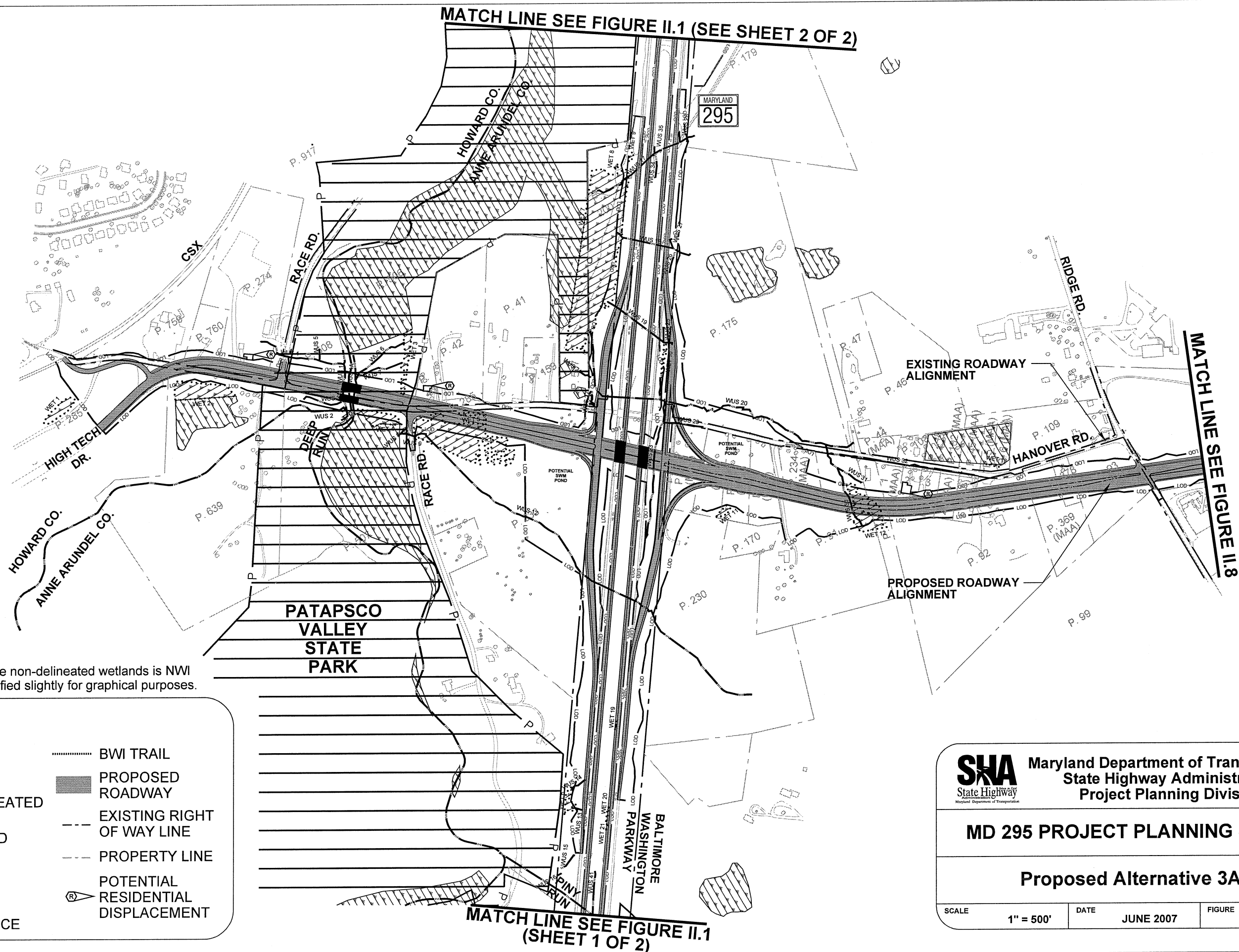
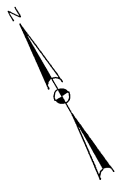


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MD 295 PROJECT PLANNING STUDY

Proposed Alternative 3

| | | | | | |
|-------|-----------|------|-----------|--------|------|
| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.2 |
|-------|-----------|------|-----------|--------|------|



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

- | | |
|------------------------|------------------------------------|
| PARK | BWI TRAIL |
| STREAM | PROPOSED ROADWAY |
| NON DELINEATED WETLAND | EXISTING RIGHT OF WAY LINE |
| DELINEATED WETLAND | PROPERTY LINE |
| PROPOSED BRIDGE | POTENTIAL RESIDENTIAL DISPLACEMENT |
| LIMIT OF DISTURBANCE | |

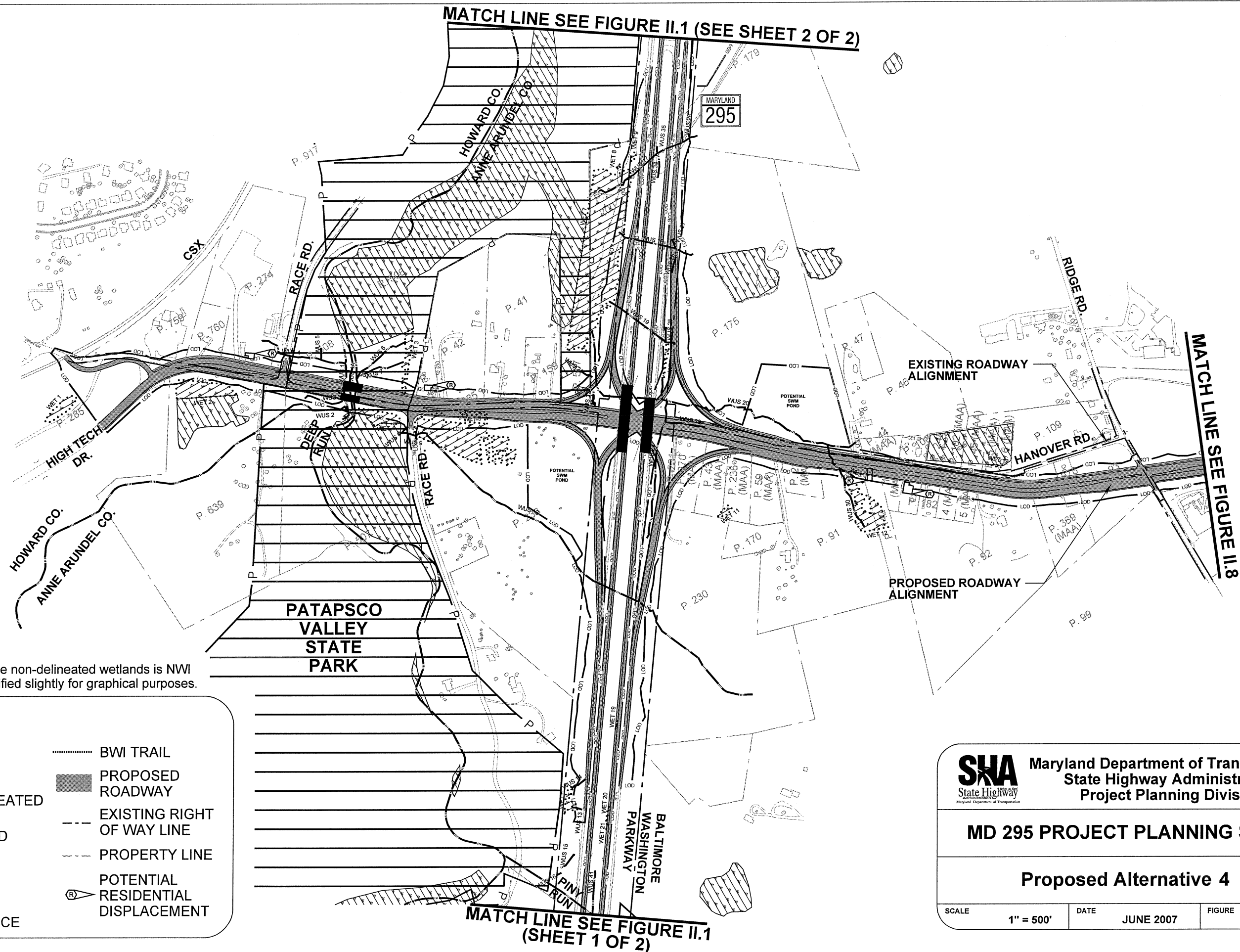


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Proposed Alternative 3A

| | | | | | |
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| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.3 |
|-------|-----------|------|-----------|--------|------|



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

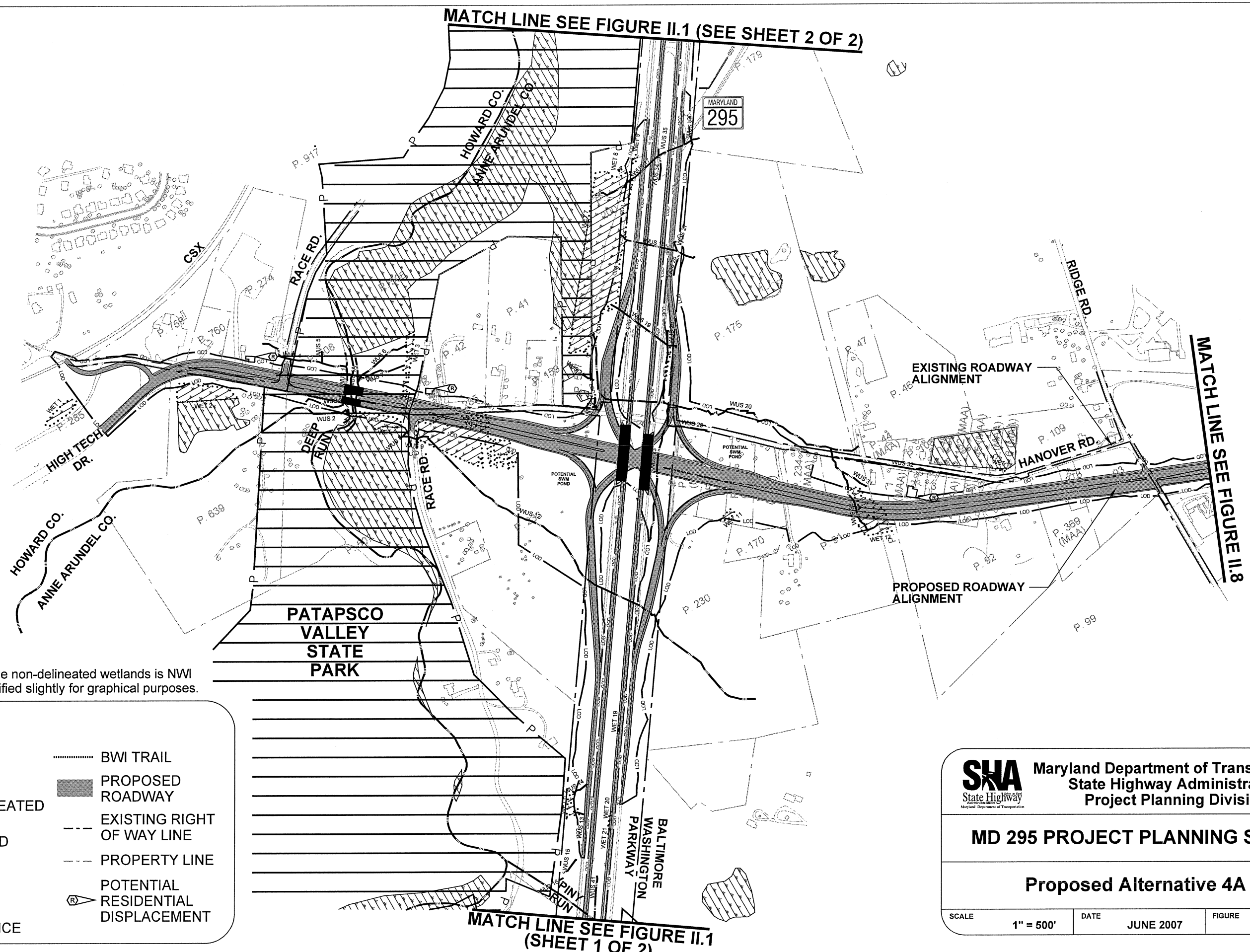













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MD 295 PROJECT PLANNING STUDY

Proposed Alternative 4

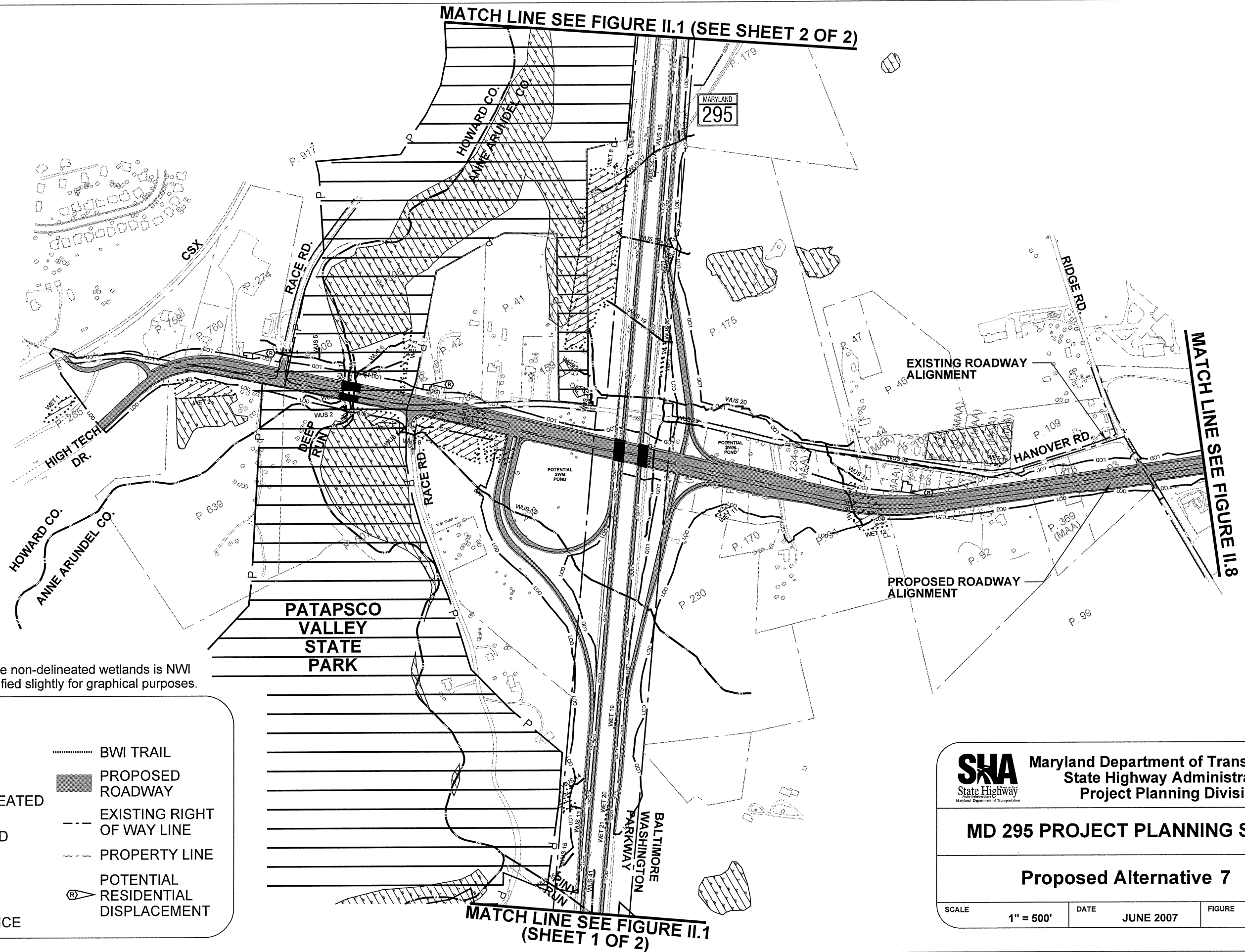
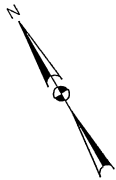
SCALE 1" = 500' DATE JUNE 2007 FIGURE II.4



| | | | |
|---|------------------------|---|------------------------------------|
|  | PARK |  | BWV TRAIL |
|  | STREAM |  | PROPOSED ROADWAY |
|  | NON DELINEATED WETLAND |  | EXISTING RIGHT OF WAY LINE |
|  | DELINEATED WETLAND |  | PROPERTY LINE |
|  | PROPOSED BRIDGE |  | POTENTIAL RESIDENTIAL DISPLACEMENT |
|  | LIMIT OF DISTURBANCE | | |

**MATCH LINE SEE FIGURE II.1
(SHEET 1 OF 2)**

| | | |
|-----------|-----------|--------|
| SCALE | DATE | FIGURE |
| 1" = 500' | JUNE 2007 | 11.5 |



Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

- | | |
|------------------------|------------------------------------|
| PARK | BWV TRAIL |
| STREAM | PROPOSED ROADWAY |
| NON DELINEATED WETLAND | EXISTING RIGHT OF WAY LINE |
| DELINEATED WETLAND | PROPERTY LINE |
| PROPOSED BRIDGE | POTENTIAL RESIDENTIAL DISPLACEMENT |
| LIMIT OF DISTURBANCE | |

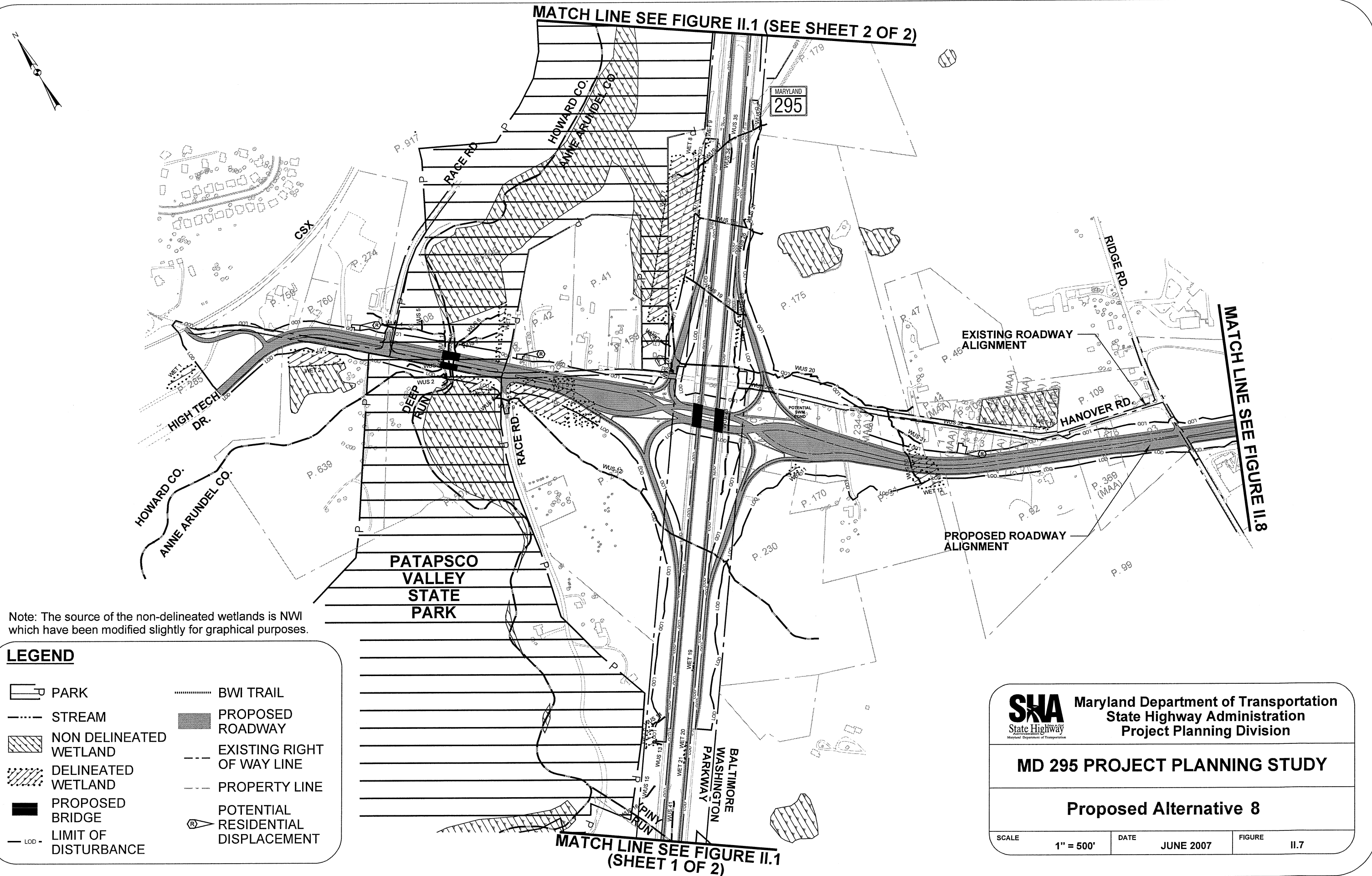
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Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 7

| | | | | | |
|-------|-----------|------|-----------|--------|------|
| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.6 |
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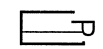



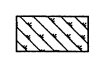

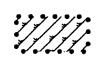



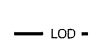




MATCH LINE SEE
FIGURES II.2, II.3, II.4, II.5, II.6, II.7

Note: The source of the non-delineated wetlands is NWI which have been modified slightly for graphical purposes.

LEGEND

- | | |
|--|--|
|  PARK |  BWI TRAIL |
|  STREAM |  PROPOSED ROADWAY |
|  NON DELINEATED WETLAND |  EXISTING RIGHT OF WAY LINE |
|  DELINEATED WETLAND |  PROPERTY LINE |
|  PROPOSED BRIDGE |  POTENTIAL RESIDENTIAL DISPLACEMENT |
|  LIMIT OF DISTURBANCE | |



Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternatives 3, 3A, 4, 4A, 7 and 8

| | | | | | |
|-------|-----------|------|-----------|--------|------|
| SCALE | 1" = 500' | DATE | JUNE 2007 | FIGURE | II.8 |
|-------|-----------|------|-----------|--------|------|

Existing Environment and Impacts

III. EXISTING ENVIRONMENT AND IMPACTS

This section describes the existing conditions in the study area and the potential impacts of the proposed improvements to MD 295 and Hanover Road. The categories presented affect relevant environmental disciplines identified in the Federal Highway Administration (FHWA) 23 Code of Federal Regulations (CFR) Part 771, “Environmental Impact and Related Procedures,” Federal Aviation Administration (FAA) Order 1050.1E, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, and all other appropriate Federal, State, and local laws.

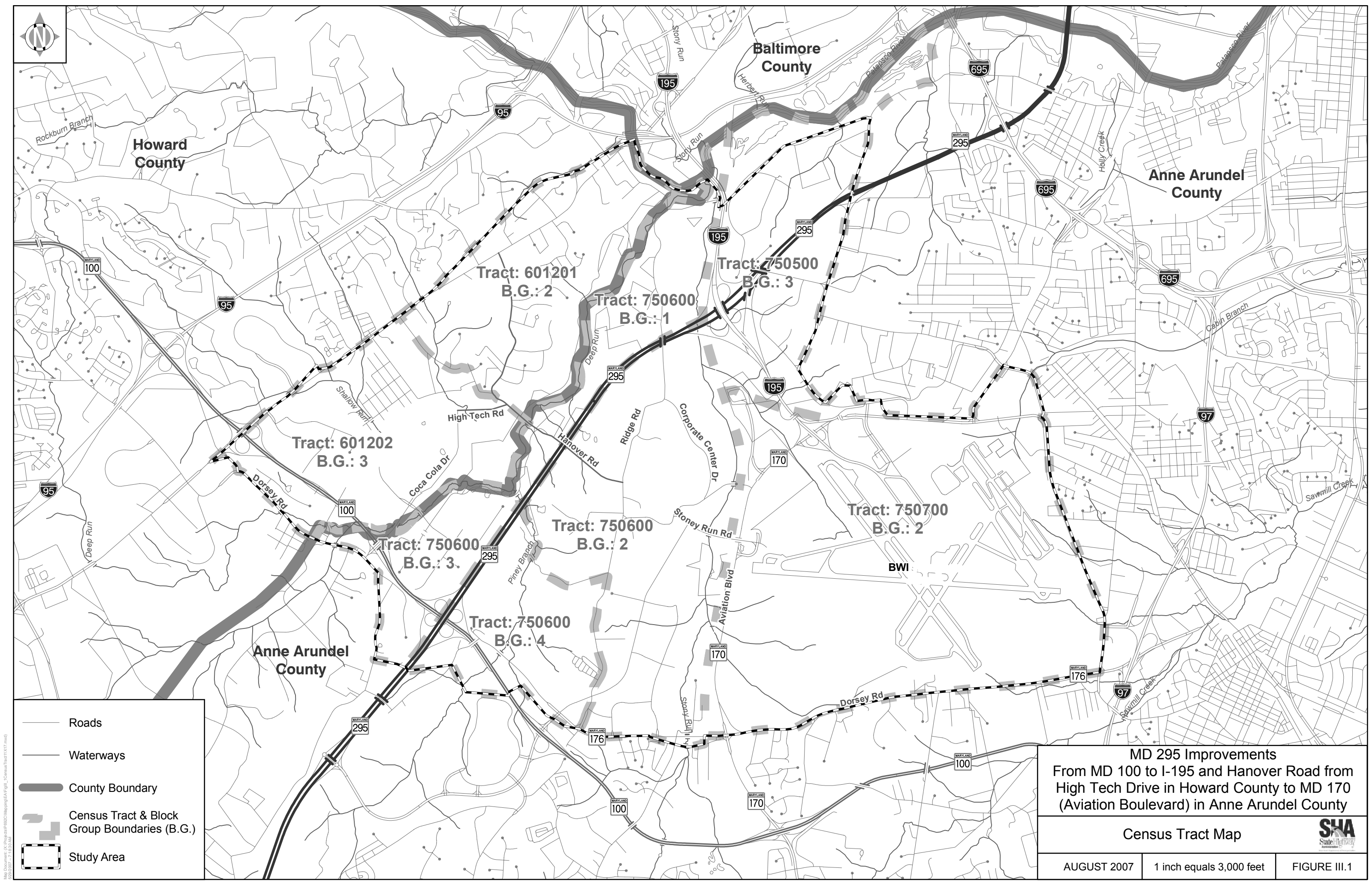
A. Social Characteristics

A socio-economic inventory was conducted as part of the MD 295 Study and is summarized in the following narrative. For additional details, refer to the *MD 295 Community Effects Assessment Technical Report* (SHA 2007a).

The inventory involved the identification of communities, community facilities, and commercial and industrial facilities within the study area. In addition, data regarding population, ethnicity, economics, and other demographics, which were available through the US Census Bureau’s *Census 2000*, were compiled and evaluated. Data were collected at the census tract level. The census tracts that encompass the study area are depicted on Figure III.1.

1. Population and Housing

Table III-1 shows population statistics for the State of Maryland, Anne Arundel County, Howard County, and the study area. Approximately 10 percent of the population in the study area is over age 65, also approximating the state and county percentages. Less than one percent of the area’s population is considered to be below the poverty level, which is lower than the state and county percentages. The percent of persons within the study area with one or more disabilities is 21, within the range of the percentages for Anne Arundel and Howard Counties. The study area’s population is composed primarily of persons classified as White (88 percent).



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- Roads
- Waterways
- County Boundary
- Census Tract & Block Group Boundaries (B.G.)
- Study Area

MD 295 Improvements

From MD 100 to I-195 and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County

Census Tract Map

SHA State Highway Administration

| | | |
|-------------|--------------------------|--------------|
| AUGUST 2007 | 1 inch equals 3,000 feet | FIGURE III.1 |
|-------------|--------------------------|--------------|

Table III-1: Population Characteristics, 2000.

| Characteristic | | State of Maryland | Anne Arundel County | Howard County | Study Area |
|---|------------------------|-------------------|---------------------|---------------|-----------------------|
| Total Population | | 5,296,486 | 489,656 | 247,842 | 4,766 |
| Projected Population for 2030 | | 7,022,251 | 567,600 | 321,100 | n/a |
| %Male / %Female | | 48/52 | 50/50 | 49/51 | 50/50 |
| Percent of Population 65 Years and Older | | 11 | 10 | 7 | 10 |
| Percent of Population in Poverty ¹ | | 9 | 5 | 4 | 1 |
| Median Household Income | | \$52,868 | \$61,768 | \$74,167 | \$60,949 ² |
| Percent of the Population with One or More Disabilities | | 28 | 23 | 18 | 21 |
| Racial Distribution | White | 64% | 81% | 74% | 88% |
| | Black | 28% | 14% | 14% | 6% |
| | American Indian | <1% | <1% | <1% | <1% |
| | Asian/Pacific Islander | 4% | 2% | 8% | 3% |
| | Other | 2% | 1% | 1% | 2% |
| | Two or More Races | 2% | 2% | 2% | <1% |
| % Population of Hispanic Origin ³ | | 4 | 4 | 3 | 1 |
| % Minority | | 36 | 19 | 26 | 13 |

Source: U.S. Census Bureau 2000; U.S. Census Bureau, Interim State Population Projections, 2005.

¹Poverty and Income data based on 1999 census sample data

²Average of the median incomes for the Census Tracts after they were weighted by population

³Population of Hispanic Origin can be of any race

Table III-2 gives the housing statistics for the State of Maryland, Anne Arundel County, and Howard County. Information on the housing characteristics for the study area has not been included due to changes in the census tract boundaries between 1990 and 2000.

Table III-2: Housing Characteristics.

| Characteristic | State of Maryland | Anne Arundel County | Howard County |
|----------------------------------|-------------------|---------------------|---------------|
| Housing Units in 1990 | 1,849,414 | 157,194 | 72,583 |
| Housing Units in 2000 | 2,145,283 | 186,937 | 92,818 |
| Percent change from 1990 to 2000 | 16 | 19 | 28 |

Source: U.S. Census Bureau 1990 and 2000; U.S. Housing Market Conditions Summary

2. Environmental Justice

Executive Order (EO) 12898 “Federal Actions to Address the Environmental Justice in Minority and Low-Income Populations” was signed on February 11, 1994 (commonly referred to as environmental justice). The EO requires the assessment of disproportionately high and adverse human health and environmental effects on minority and low-income populations resulting from proposed federal actions. The EO reaffirms the provisions of Title VI of the Civil Rights Act of 1964 and related statutes, emphasizing the incorporation of those provisions with existing

planning and environmental processes. EO 12898 adds low-income to the list of populations that should be investigated to ensure that they are not excluded from the benefits of the project or subjected to discrimination caused by federal programs, policies, and activities.

a) Methods

Baseline demographic information at the census block group level was obtained from the 2000 U.S. Census to identify preliminarily the locations of minority and low-income populations. The block group data was compared to overall project area totals to identify concentrations of minority and low-income populations.

Low-income is defined as persons whose median household income is at or below the Department of Health and Human Services (DHHS) poverty guidelines. The poverty guidelines issued by the DHHS are abstracted from the original poverty thresholds updated each year by the U.S. Census Bureau.

Minority means a person who is identified as:

- Black (a person having origins in any of the black racial groups of Africa)
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture origin, regardless of race)
- Asian American (a person having origins in any of the original peoples of the Far East, South East Asia, the Indian subcontinent, or the Pacific Islands)
- American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition)

b) Findings

Census 2000 data shows that the median household income for the study area block groups is higher than the DHHS poverty guidelines for the year 2006, and the percent of the population in poverty for Anne Arundel County and Howard County census block groups was five percent and four percent, respectively (Table III-1). The percentage of the population in poverty for the study area was less than one (0.7) percent (Table III-3). Six of the eight census tract blocks have zero percent of the population below the poverty level. The other two census tract block groups have 28 and less than one (0.3) percent of the population below the poverty level. Of these, only one is above the study area average.

As identified through U.S. Census data and shown in Table III-1, approximately 13 percent of the study area population is part of a minority group. This is lower than the average percentage of minorities for Anne Arundel County (19 percent) and Howard County (26 percent). Two of the eight census tract block groups within the study area contain zero percent minority population (Table III-3). The remaining six census tract block groups range from 10 percent minority to 59 percent minority. Three of these contain a higher percent minority population than the averages for Anne Arundel and Howard Counties.

The state and county governments, area schools, local churches, and community groups that were contacted did not identify any minority or low-income communities or groups within the study area.

c) Impacts

Based on a review of the census data, there are three census block groups that potentially have Environmental Justice populations. One block group (Census Tract 7506 Block Group 3) contained a meaningfully greater percent in poverty (28.0 percent versus 0.7 percent for the average of all block groups in the study area). This block group, as well as Census Tract 7506 Block Group 4 and Census Tract 7507 Block Group 2, contained meaningfully greater (defined as greater than five percent of the study area average) percent minority populations. Although there are potential minority or low income populations within the study area based on the census data, no specific populations were identified within the area of impact or displaced properties. Additionally, the impacts are not expected to be disproportionate because the proposed roadway improvements are applied relatively equally throughout the project area.

None of the alternatives currently under consideration are expected to result in a negative impact to elderly or handicapped individuals. Access to the senior centers and assisted living facilities in the study area vicinity would not be affected by the build alternatives.

Title VI Statement

It is the policy of the SHA to ensure compliance with the provisions of Title VI of the Civil Rights Act of 1964, and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age, religion, or physical or mental handicap in all SHA projects funded in whole or in part by the FHWA. The SHA will not discriminate in highway planning, highway design, highway construction, right-of-way acquisitions, or provision of relocation advisory assistance. This policy has been incorporated in all levels of the highway planning process in order that proper consideration may be given to the social, economic, and environmental effects of all highway projects. Alleged discriminatory actions should be addressed for investigation to the Equal Opportunity Section of the SHA, to the attention of Ms. Jennifer Jenkins, Director, Office of Equal Opportunity, 707 North Calvert Street, Mail Stop C-406, Baltimore, Maryland 21202.

Table III-3: Racial and Ethnic Makeup of the Census Tract Block Group (BG) Populations (2000).

| | | Study Area | Census Tract 6012.01 BG 2 | Census Tract 6012.02 BG 3 | Census Tract 7505 BG 3 | Census Tract 7506 BG 1 | Census Tract 7506 BG 2 | Census Tract 7506 BG 3 | Census Tract 7506 BG 4 | Census Tract 7507 BG 2 |
|----------------------------------|--------------------------|------------|---------------------------|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Population | | 4,766 | 3,153 | 950 | 158 | 52 | 194 | 93 | 162 | 4 |
| Racial Distribution | White | 4,203 | 2,816 | 843 | 158 | 52 | 182 | 38 | 112 | 2 |
| | Black | 299 | 148 | 34 | 0 | 0 | 12 | 55 | 50 | 0 |
| | American Indian | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Asian | 164 | 111 | 51 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Other | 76 | 62 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Two or More Races | 13 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Hispanic* | 69 | 62 | 0 | 0 | 0 | 7 | 0 | 0 | 0 |
| Total Minority | | 632 | 399 | 107 | 0 | 0 | 19 | 55 | 50 | 2 |
| Percent Minority | | 13.3% | 12.7% | 11.3% | 0% | 0% | 9.8% | 59.1% | 30.9% | 50.0% |
| Median Household Income | | \$60,949** | \$78,578 | \$70,208 | \$40,729 | \$92,124 | \$41,094 | \$40,417 | \$58,188 | \$66,250 |
| Individuals in Poverty*** | | 35 | 9 | 0 | 0 | 0 | 0 | 26 | 0 | 0 |
| Percent in Poverty | | 0.7% | 0.3% | 0% | 0% | 0% | 0% | 27.9% | 0% | 0% |

*Source: U.S. Census Bureau 2000. Race data does not sum to the total number of persons in each category because 1) Hispanics may be of any origin, and 2) some census participants may identify themselves with more than one race.

**Number represents the average median household income for the study area.

*** Low-Income and Poverty data is from 1999 Census information.

3. Public Participation

The SHA organized four meetings with the Stakeholders Group and one workshop for the general public. The first Stakeholders Group meeting was held in February 2005 and introduced the Stakeholders Group to the proposed project and the project planning process. The Stakeholders Group identified issues relevant to the community. A Purpose and Need document and conceptual designs were developed from the input of the Stakeholders Group and design criteria to meet projected traffic demand. The second meeting with the Stakeholders Group was held in October 2005 to present the alternatives and receive comments. The third meeting with the Stakeholders was a Business Coordination Meeting held in May 2006, and the fourth meeting with the Stakeholders was held in October 2006 to discuss the status of the project. A list of the Stakeholders and summaries of the meetings are included in Section IV.C (pages IV-3 through IV-5) and Appendix B (pages 86 through 101).

The MD 295 Alternatives Public Workshop was held in January 2006. The workshop provided the opportunity for residents and community members to review and comment on the conceptual designs. Ninety-four people attended the meeting and 21 comment cards were returned during or subsequent to the meeting. Three of the responses were not in favor of the proposed project. Three were supportive of widening MD 295, but were not supportive of a new interchange or improvements to Hanover Road. Five respondents expressed concern about increased traffic, but did not indicate a preferred alternative. Six expressed support for one or more of the alternatives. The comments received from this meeting are included in Appendix B (pages 105 to 117).

The SHA also contacted several religious institutions to ensure that members were aware of the project, offer continued coordination to address concerns, and reach out to potential minority or Limited English Proficiency (LEP) groups. The Ban Suk Presbyterian Church in America was contacted by telephone on August 24, 2006. The Ohn-Nuree Mission Church and Gaines A.M.E. Church were each contacted by letter on November 13, 2006. Documentation of these outreach efforts is included in Appendix B (pages 118 through 120).

4. Neighborhoods/Communities

a) Existing Conditions

The study area is composed of many small residential neighborhoods, industrial parks, and natural areas, in addition to BWI. There are four communities within the study area: Patapsco, Elkridge, Hanover, and Harmans (Figure III.2A).

The Patapsco community is located in Anne Arundel County in the northeastern section of the study area. This area contains a portion of the Patapsco Valley State Park, one residential subdivision, and business and technology parks. One educational facility, the Maritime Institute of Technology & Graduate Studies (MITAGS), is located just beyond the study boundary.

The Elkridge community is located within Howard County in the northwestern section of the study area. It consists mostly of residential areas, as well as industrial parks and business centers, numerous religious institutions, a post office, a library, and a fire station. A rail line, the Maryland Rail Commuter Services (MARC) Camden Line, traverses the Elkridge area.

The Hanover community is located within Anne Arundel County in the southwestern section of the study area. The sections of Hanover within the study area consist mostly of industrial parks and business centers, one religious facility, scattered residences, and a post office. One educational facility, the Anne Arundel County Community College (AACC) at Arundel Mills is located in Hanover on the outskirts of Harmans. Portions of the Patapsco Valley State Park and open space/forested land/undeveloped land are also located in this area.

The Harmans community is located within Anne Arundel County in the south-central section of the study area. The area contains residences, business parks, religious facilities, a post office, and a fire station. Arundel Mills Mall is on the outskirts of Harmans, outside the study area. An Amtrak/MARC rail line travels north-south through the Harmans section of the study area.

b) Impacts

The No-Build Alternative would not result in displacements or ROW acquisitions, and would have no direct effects on neighborhoods or communities. Under this alternative, traffic congestion is anticipated to increase in the project area, resulting in decreased mobility and quality of life. The increase in traffic congestion could affect air quality (see Section III.F, pages III-39 through III-44).

Access and mobility to MD 295 within the communities and surrounding areas would increase with the build alternatives, as local residents would have direct access to MD 295. The project would also improve access to BWI from MD 295, which would have the potential to increase traffic along Hanover Road and within the project area as a whole.

With the widening of MD 295, traffic congestion along the roadway would lessen under all the build alternatives due to increased operational capacity and improved level of service (LOS) along MD 295. Proposed improvements from any of the build alternatives would allow faster travel to regional services. There would be some adverse, short-term effects to motorists, residents, and businesses during the construction phase of the project due to lane and access closures. However, these impacts would be temporary and mitigated with the development of a Maintenance of Traffic (MOT) plan.

The residential neighborhoods that would be most directly affected by the build alternatives are in the Hanover community. There are some scattered residences along Hanover Road and Ridge Road that are located immediately adjacent to the proposed improvements. Alternatives 3 and 4 would each result in four residential displacements (Figures II.2 and II.4), and Alternatives 3A, 4A, 7, and 8 would each result in three residential displacements (Figures II.3, II.5, and II.7). Displacements and ROW impacts for each alternative are summarized in Table III-4.

Property owners affected by displacement will receive relocation assistance in accordance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Appendix A). In the event that comparable replacement housing is not available for displaced persons or that available replacement housing is beyond their financial means, replacement housing as a last resort will be utilized. In addition, fair market value would be provided to all property owners as compensation for land acquisition.

Table III-4: Displacement/Right-of-Way Impacts by Alternative.

| | Alternative | | | | | |
|--|-------------|------|------|------|------|------|
| | 3 | 3A | 4 | 4A | 7 | 8 |
| Number of Properties with Partial ROW Acquisitions | 40 | 39 | 44 | 41 | 41 | 42 |
| Potential Residential Displacements | 4 | 3 | 4 | 3 | 3 | 3 |
| Business/Industrial Displacements | 0 | 0 | 0 | 0 | 0 | 0 |
| ROW Acres Required | 59.6 | 58.4 | 59.6 | 62.6 | 65.7 | 60.7 |

Property owners affected by displacement will receive relocation assistance in accordance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Appendix A). In the event that comparable replacement housing is not available for displaced persons or that available replacement housing is beyond their financial means, replacement housing as a last resort will be utilized. In addition, fair market value would be provided to all property owners as compensation for land acquisition.

Alternatives 7 and 8 would also require reconfiguring the driveway access for parcels east of Hanover Road (Table III-5). The driveways would be shortened as a result of the roadway improvements, reducing the distance between the roadway and residents' front doors and decreasing the amount of lawn frontage. All properties would still be accessible during and after construction. With the increased traffic along Hanover Road, exiting/entering these driveways could become more difficult or less safe for the residents. Increased traffic could also draw the interest of commercial developers, leading to more traffic and congestion. However, the proposed widening of Hanover Road from two to four travel lanes would help alleviate any increased traffic and congestion.

Table III-5: Driveway Impacts.

| Parcel | Use | Alternatives 3 and 4 | | Alternatives 3A, 4A, 7, and 8 | |
|--------|-------------|--------------------------|------------------------------------|-------------------------------|------------------------------------|
| | | Total lawn frontage (ft) | Total lawn frontage reduction (ft) | Total lawn frontage (ft) | Total lawn frontage reduction (ft) |
| 41 | Residential | 162 | 4 | 0 | 0 |
| 92 | Residential | 244 | 88 | 244 | 161 |
| 760 | Residential | 133 | 43 | 133 | 43 |
| 42 | Commercial | 340 | 26 | 340 | 10 |
| 108 | Commercial | 50 | 15 | 50 | 15 |
| 159* | Commercial | N/A | N/A | N/A | N/A |

*Driveway being relocated.

There are currently no sidewalks for pedestrians or bike lanes for bicyclists along Hanover Road. The improvements to Hanover Road include a bike lane and a sidewalk. With these additions, bicyclists and pedestrians would be able to safely access the BWI Trail from Hanover

Road/Stoney Run Road. These improvements would also provide bicyclists and pedestrians with access to the MARC BWI Station and the MARC Penn Line. In addition, pedestrians would have safer access to Bus Route 17 along Aviation Boulevard.

5. Effects on Aesthetics and Visual Quality

The No-Build Alternative would not affect the aesthetics or visual character in the project area. Neither would the widening of MD 295 within the median, since the proposed roadway's geometry and elevation would be consistent with the existing conditions.

All the build alternatives would introduce an interchange in an area where one does not currently exist. Alternatives 3 and 4 use the existing Hanover Road where MD 295 is currently bridged over it. These alternatives would cause less of a visual disturbance than Alternatives 3A, 4A, 7 and 8, which would relocate Hanover Road approximately 200 feet south of its current location. The build alternatives would all negatively impact the visual quality and aesthetics of a small, undeveloped portion of Patapsco Valley State Park. The direct access ramps at MD 170 would also affect aesthetics by introducing two ramps where none currently exist. The direct access ramps would affect aesthetics associated with the BWI Trail in the vicinity of Stoney Run Road and MD 170.

Each of the build alternatives would affect the aesthetics and visual characteristics of the project area to some extent. Landscaping techniques would be planned during the final design to offset visual impacts. The project would be designed to mimic or enhance the current appearance of the surrounding area as much as possible.

6. Community Facilities and Services

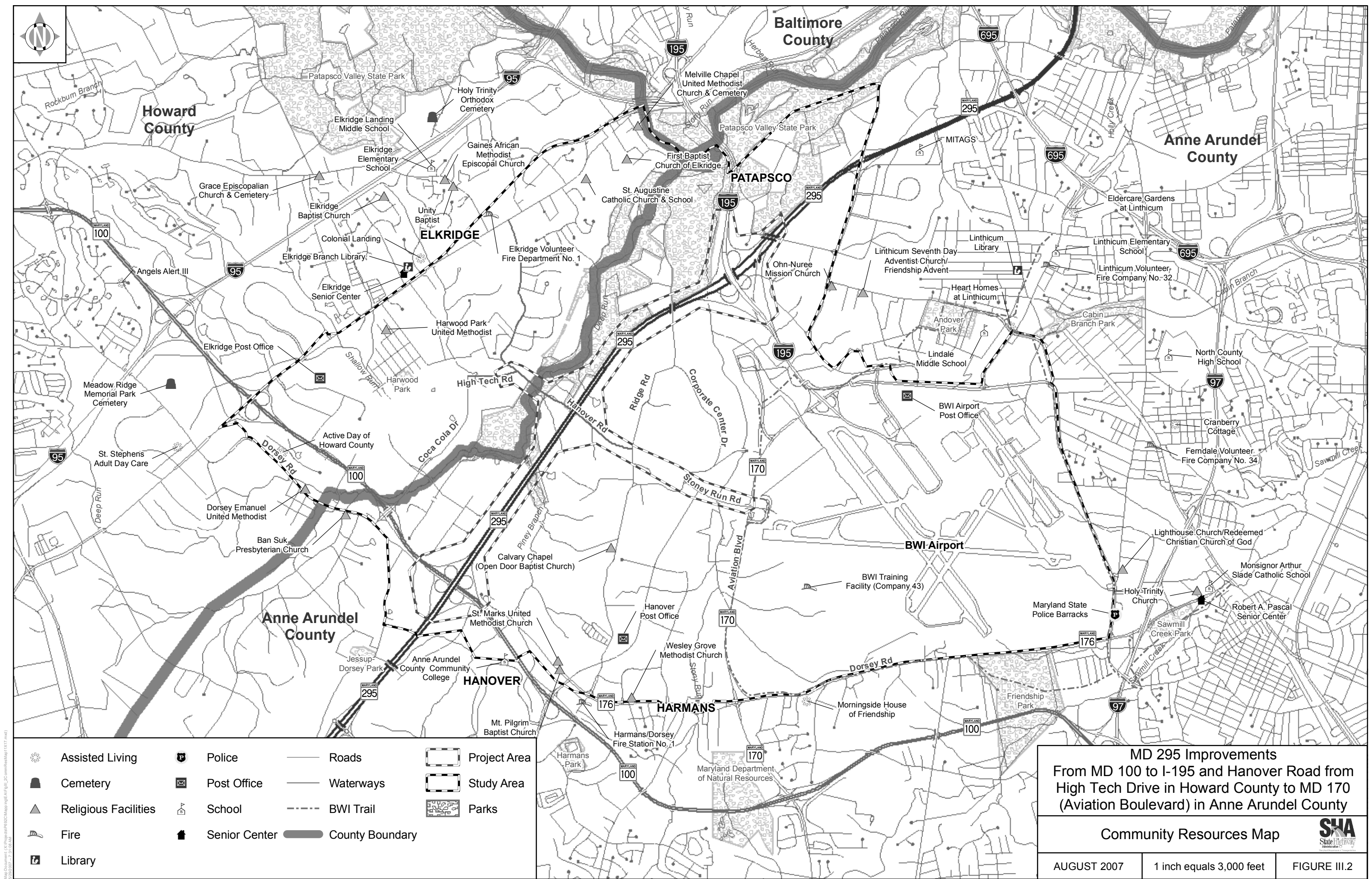
Community facilities and services were identified and inventoried by reviewing census data, geographical information systems (GIS) mapping, ADC maps, discussions with local planners, and field reconnaissance. Figures III.2 and III.3 illustrate the location of community facilities and services within the vicinity of the study area.

a) Educational Facilities

Schools

There are no public educational facilities within the study area, but there are two public elementary schools (Elkridge Elementary School and Linthicum Elementary School), two public middle schools (Elkridge Landing Middle School and Lindale Middle School), and one public high school (North County High School) slightly outside the study area. Due to the locations of schools and feeder boundaries, many of the roadways within the study area are used by public school buses to transport children to and from school. One private school, the St. Augustine Catholic School, is located within the study area. Two other private schools (Monsignor Arthur Slade Catholic School and Friendship Adventist School) are located slightly outside the study area. In addition, the MITAGS is located just outside the study area, as is the AACC campus at Arundel Mills Mall.

There would be no direct effects by the proposed alternatives to any of the educational facilities within the study area vicinity, including the higher educational facilities (AACC and MITAGS). Modifications to the school bus routes may occur due to the proposed interchange at Hanover



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MD 295 Improvements

From MD 100 to I-195 and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County

Community Resources Map

AUGUST 2007

1 inch equals 3,000 feet

FIGURE III.2

SHA

State Highway Administration

Road and traffic signal at the new Hanover Road/Ridge Road intersection. Coordination with the school districts will continue throughout the design process.

Libraries

The Elkridge Branch Library of the Howard County Public Library System is located within the study area. The closest library in Anne Arundel County is the Linthicum Library, which is outside the study area. None of the libraries that serve the study area would be impacted.

b) Post Offices

Three post offices provide services to the study area; the Elk Ridge Post Office, the BWI Post Office, and Hanover Post Office. None of these post offices would be directly affected by any of the alternatives.

c) Health Care Facilities

The nearest hospital to the project area is North Arundel Hospital, which is located approximately two miles southeast of the study area. There are no senior centers within the study area, but the Maryland Department of Aging has two senior centers outside the study area that would likely serve study area residents (Elkridge Senior Center and Robert A. Pascal Senior Center). There are no assisted living care facilities within the study area; however, there are four within Anne Arundel County near the study area border (Cranberry Cottage, Eldercare Gardens, Heart Homes, and Morningside House of Friendship). One senior/disabled day care facility is located within the Howard County portion of the study area (Active Day of Howard County), and three additional facilities are located near the study area (Colonial Landing, St. Stephens Adult Day Care, and Angels Alert III).

None of the alternatives would directly affect the health care facilities located within the study area. Nor are impacts expected to facilities outside the study area, such as North Arundel Hospital, that provide services to the residents in the study area.

d) Religious Facilities and Cemeteries

Eleven religious institutions are located within the study area: Melville Chapel United Methodist Church, Grace Episcopalian Church, First Baptist Church of Elkridge, St. Augustine Catholic Church, Harwood Park United Methodist, Calvary Chapel, Dorsey Emanuel United Methodist, St. Marks United Methodist Church, Mt. Pilgrim Baptist Church, Wesley Grove Methodist Church, and Ban Seek Presbyterian Church. There are eight additional religious institutions near, but outside, the study area boundary. These include Unity Baptist, Gaines Methodist, Elkridge Baptist, Linthicum Seventh Day Adventist Church, Ohn-Nuree Mission Church, Lighthouse Church/Redeemed Christian Church of God, and Holy Trinity Church. Two cemeteries are located within the northwest portion of the study area (Melville Chapel United Methodist Cemetery and Grace Episcopalian Cemetery). Both are associated with churches. Two additional cemeteries were located on BWI property according to ADC maps. These cemeteries were not field verified because they are located on airport property and were not accessible. Consequently, they were not included on project mapping.

There would be no direct effects by the proposed alternatives to the religious facilities or cemeteries within the study area. The closest religious institution to the proposed Hanover Road interchange is located on Ridge Road, south of the proposed Hanover Road/Ridge Road intersection relocation. The build alternatives have the potential to improve traffic flow to this religious facility.

e) Parklands and Recreational Facilities

A portion of the Patapsco Valley State Park roughly parallels MD 295 along Deep Run, crossing Hanover Road in the western portion of the study area (Figure III.2 and Figures II.1 through II.7). The BWI Trail encircles the airport property and intersects the eastern portion of the study area along MD 170 (Aviation Boulevard) at Stoney Run Road (Figure III.2 and Figure II.8). Both of these resources are considered Section 4(f) resources under the U.S. Department of Transportation Act of 1966 (49 USC 303(c)). Section 4(f) permits the use of land from a significant publicly-owned public park, recreation area, wildlife or waterfowl refuge, or land of a historic site of national, state, or local significance (as determined by Federal, State, or local officials having jurisdiction over the resource), only if there is no feasible and prudent alternative to the use of such land and if the action includes all possible planning to minimize harm to the protected property resulting from such use. A section 4(f) “use” occurs when a property from a Section 4(f) resource is permanently acquired and incorporated into a transportation project or when there is an occupancy of land that is adverse in terms of the statute’s preservationist purposes of maintaining the integrity of the resource, or when there is a constructive use of land. In some cases, the project proponent(s) and the responsible official(s) with jurisdiction over the resource may agree that a particular use of Section 4(f) land will have no adverse effect on the protected resources, resulting in a de minimis impact finding.

The FHWA Guidance for Determining De Minimis Impacts to Section 4(f) Resources indicates that the following criteria must be met in order to satisfy the requirements of a de minimis impact finding.

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).
- 2) The official(s) with jurisdiction over the property are informed of FHWA’s intent to make the de minimis impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).
- 3) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

Patapsco Valley State Park

Patapsco Valley State Park is owned and maintained by the Maryland Department of Natural Resources (MD DNR). The park was created in 1907 as one of Maryland’s first parks. Patapsco Valley State Park extends along 32 miles of the Patapsco River and its tributaries. It encompasses nearly 14,000 acres of land and five developed recreational areas. Recreational opportunities available in the park include hiking, fishing, camping, canoeing, horseback and

mountain bike trails. The area of the park along Deep Run in the study area is undeveloped, riparian forest land, and there are no active recreational uses. Although portions of the park were acquired or developed with money from the Land and Water Conservation Fund Act, the portions of the park within the project area were not.

Park impacts would range from 2.85 acres to 3.23 acres depending on the build alternative (Table III-6). The impacts would be associated with the widening of Hanover Road where it currently bisects the park property at Deep Run, as well as the proposed interchange at Hanover Road, primarily in the northwest quadrant of MD 295 and Hanover Road (Figures II.2 through II.7). The impacts represent approximately 0.02 percent of the total acreage of Patapsco Valley State Park.

Table III-6: Impacts to Patapsco Valley State Park.

| | Alternative | | | | | |
|---|-------------|---------|---------|---------|---------|---------|
| | 3 | 3A | 4 | 4A | 7 | 8 |
| Widening of Hanover Road (acres) | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 |
| MD 295/Hanover Road Interchange (acres) | 0.12 | 0.01 | 0.38 | 0.05 | 0.00 | 0.12 |
| Total Impact (acres) | 2.97 | 2.86 | 3.23 | 2.90 | 2.85 | 2.97 |
| Percent of Park | 0.021 % | 0.020 % | 0.023 % | 0.021 % | 0.020 % | 0.021 % |

The SHA met with the MD DNR on April 10, 2007 to discuss the potential impacts to Patapsco Valley State Park. The MD DNR confirmed that there are no active recreational uses in this portion of the park, and recreational areas of the park would not be impacted by the project. As discussed at the April 10 meeting with the MD DNR, additional efforts to continue to minimize impacts to the park and other resources within the project area will be made as the project progresses.

As part of the Section 4(f) process, the project team also analyzed park avoidance and minimization options for this project. Other than the No-Build Alternative, two park avoidance options were considered. One park avoidance option would route traffic through the MD 100 interchange instead of widening Hanover Road through the Patapsco Valley State Park. The other avoidance option included the construction of a new interchange, with improvements to Hanover Road being restricted to the area east of the park boundaries.

Although these avoidance options are feasible, they are not prudent because they would not fully address the purpose and need for the project. They would not provide capacity in support of anticipated increases in residential and commercial traffic in Howard and Anne Arundel counties, an element of the purpose and need. Both Howard and Anne Arundel counties would like Hanover Road improved to four lanes to serve as a secondary emergency roadway and to provide a secondary access to BWI. Moreover, based on the existing level of congestion and near-failing conditions at the MD 100/MD 295 interchange, it is projected that the unimproved

western portion of Hanover Road would continue to carry the majority of local traffic seeking access to the new interchange. In addition to not fully addressing the purpose and need, the avoidance options would not correct the existing substandard deficiencies on Hanover Road that include flooding during heavy rains and the lack of sidewalks. The lack of sidewalks is inconsistent with the Americans with Disabilities Act (ADA) standards in terms of logical connections. Furthermore, the avoidance options would not provide a trail connection between the BWI Trail and surrounding area and the Patapsco Valley State Park and points west.

A minimization option would involve reducing the typical section of Hanover Road to two bicycle compatible lanes without a median, a ten foot hiker biker trail on the north side, and a five foot sidewalk on the south side. While this minimization option would correct the existing substandard deficiencies on Hanover Road, it would not provide the four lanes that both Howard and Anne Arundel counties desire. Furthermore, reduction of the typical section would require Hanover Road to be closed for long periods of time during construction, whereas the alternatives retained for detailed study would not require closure. Long periods of complete closure would be undesirable because Hanover Road is used by Anne Arundel and Howard county emergency service providers.

As previously mentioned, FHWA has established three main criteria to determine whether a project will have a de minimis impact on Section 4(f) resources. Upon selection of a preferred alternative, the SHA plans to seek FHWA's concurrence on a de minimis finding for the proposed impacts to the Patapsco Valley State Park. The SHA has determined that the proposed impacts meet the de minimis criteria for the following reasons:

- 1) The proposed improvements would use undeveloped portions of the park which provide very limited passive recreational uses, natural habitat and watershed benefits. There are no active recreational uses in the portion of the park that would be impacted by the project. The park impacts represent approximately 0.02 percent of the total acreage of Patapsco Valley State Park. In a letter to MD DNR, dated May 29, 2007 (Appendix B, page 32), SHA requested input from DNR on the alternatives retained for detailed study and additional strategies that could be pursued to provide mitigation of impacts.
- 2) In the May 29, 2007 letter to MD DNR (Appendix B, page 32), SHA discussed their intent to pursue the de minimis impact finding and requested the MD DNR's agreement (as officials with jurisdiction over the Patapsco Valley State Park), that the proposed impacts would not adversely affect the activities, features, and attributes of the park.
- 3) The public will be offered the opportunity to review and comment on SHA's intention to pursue a de minimis impact finding at the Public Hearing in the fall of 2007.

Documentation of Section 4(f) coordination with the MD DNR has been included in Table IV-3 (page IV-2), and Appendix B (pages 32-38). SHA will continue coordination with the MD DNR on park impacts and mitigation strategies.

BWI Trail

The BWI Trail is a 12.5-mile hiker-biker trail that encircles BWI. The trail was built and has been maintained through a public/private cooperative effort of the Anne Arundel County Department of Recreation and Parks, the MAA, SHA, MD DNR, BWI Neighbors Committee, and Maryland Transit Administration. The trail crosses the study area along the west side of MD 170 north of Stoney Run Road, and on the loop ramp connecting MD 170 and Stoney Run Road (Figure II.8).

Both Anne Arundel County and SHA own portions of the trail that would be impacted by the build alternatives. The State-owned portion of the trail being impacted is currently located within the ROW. Anne Arundel County owns the portion of the trail in the loop ramp which is designated for recreational use. The MD 295 project would potentially result in a temporary construction impact to 0.15 acre of the county-owned portion of the trail. The improvements proposed to the intersection of Stoney Run Road at the southern entrance to Northrop Grumman would involve relocation of the county-owned portion of the trail. The trail would be relocated between the eastern end of the Stoney Run Road bridge over MD 170 to the Northrop Grumman entrance for a length of approximately 400 feet. The relocated trail would be constructed first in order to avoid interruptions to the activities or purposes of the trail.

In a May 18, 2007 meeting between the SHA and Anne Arundel County, State and county representatives agreed that the Section 4(f) temporary use criteria were satisfied for the county-owned portion of the trail. A temporary occupancy of land would not constitute a Section 4(f) use if the following criteria are met: (1) The duration of the occupancy will be temporary and less than the time needed for construction of the project, and the nature and magnitude of changes to the trail will be minor; (2) The activity will not result in a change of ownership or result in retention of long-term or indefinite interests in the property for transportation purposes; (3) The improvements will not result in any temporary or permanent adverse impacts nor will there be interference with the activities or features which are important to the purpose or function that qualifies the trail for protection under Section 4(f) of the US DOT Act on either a temporary or permanent basis; and (4) The land being used will be fully restored, in that the resource will be returned to a condition that is at least as good as that which existed prior to the project. The SHA requested formal concurrence with the temporary use of the county-owned portion of the trail in a letter dated June 29, 2007, and Anne Arundel County Recreation and Parks concurred on July 5, 2007 (Appendix B; page 39).

The county confirmed at the May 18, 2007 meeting with the SHA that the project would not affect any proposed trails in the area. The county also reacted favorably to the hiker/biker lane proposed along Hanover Road. The SHA will continue to coordinate with Anne Arundel County regarding the temporary use of the affected portion of the trail.

f) Emergency Services and Law Enforcement

Three fire departments/training facilities are located within the study area, including the BWI Aircraft Rescue Firefighting Facility and BWI Training Facility. An additional six fire departments and five police departments are located outside the study area, but provide services within the study area. The emergency services and law enforcement facilities that serve the area were solicited for comments on the project and its possible effects on response time. The Anne

Arundel County Police Department and Howard County Fire and Rescue Services indicated that the project would ultimately enhance response capabilities in the area (Appendix B, pages 59-60). The Howard County Department of Police felt that the Hanover Road improvements would negatively affect fire and police response times in Harwood Park without provision of a cul-de-sac where Hanover Road crosses the CSX tracks (Appendix B, page 57). The SHA responded to the Howard County Department of Police concerns in a letter dated (Appendix B, page 58).

The No-Build Alternative would not have an immediate effect on emergency response times; however, congestion is expected to increase over time and emergency service vehicles could experience a delay in response time to calls along MD 295 or in neighborhoods/ communities within the study area.

The widening of MD 295 would improve the Level of Service (LOS), thereby reducing traffic congestion along MD 295. This improvement is expected to decrease emergency response time along MD 295. The new interchange would also allow a faster response time for emergency vehicles accessing MD 295 for any incidents along that roadway.

All the build alternatives include a traffic light at the proposed Hanover Road/MD 295 interchange and the Hanover Road/Ridge Road intersection. It is assumed these traffic signals would be timed appropriately to allow emergency service vehicles to travel through the area with no delay in response time. The improvements to Hanover Road, including the widening of the roadway, would be beneficial to emergency service vehicles by providing them with a wider roadway on which to maneuver their vehicles.

g) Transportation Facilities

Numerous modes of transportation exist within the study area, including roadways, rail lines, and BWI (Figure III.2B). MTA bus service and the Commuter Bus Route are available throughout the day and evening, seven days a week. The MTA Bus Route 17 operates within the study area, providing access to BWI and numerous industrial parks. MARC has two rail lines in the study area, one of which provides access to BWI. MTA also offers light rail service with several stations within and near the study area. According to information received from the Anne Arundel County Office of Planning and Zoning, a light rail extension with new rail stations is being considered. The proposed route crosses portions of the study area. Forty-eight airlines operate out of BWI, including commuter, charter, and cargo airlines. In 2005, the average number of passengers per day was 54,088.

There would be no change to rail and bus services as a result of the proposed build alternatives. The improvements to Hanover Road include bicycle lanes and pedestrian sidewalks. With these additions, bicyclists and pedestrians would be able to safely access the MARC BWI station to utilize the MARC Penn Line. In addition, pedestrians would have safer access to Bus Route 17 along Aviation Boulevard. These improvements may help increase use of the bus and transit services in the project area.

The improvements to MD 295 and Hanover Road would be beneficial to commuters and truck traffic to and from BWI and the BWI Business District. The project would improve connectivity between the Baltimore and Washington Metropolitan Regions as it relates to BWI and would

support existing and planned development at BWI. Over the past 15 years, passenger volume at BWI has more than doubled and is forecast to continue to grow.

h) Public Utilities

The proposed project would not impact public water, sewer, electric, or other utilities under any of the proposed alternatives, with the exception of temporary, minor, construction-related impacts.

B. Economic Environment

The following information is summarized from the *MD 295 Community Effects Assessment Technical Report* (SHA 2007a).

1. Employment Characteristics

Based on the 2000 U.S. census data in Table III-7, the median household income for Anne Arundel and Howard counties is \$61,768 and \$74,167, respectively, and the average median household income for the study area is \$60,948. The average per capita income for the State of Maryland, Anne Arundel County, Howard County, and the study area are \$25,614, \$27,578, \$32,402, and \$25,904, respectively. The per capita income of the study area is less than both Anne Arundel and Howard Counties, but slightly above that for the State of Maryland.

Table III-7: Employment Characteristics

| Characteristics | Anne Arundel County, Maryland | Howard County, Maryland | Study Area |
|--|---|--|--|
| Median Household Income* | \$61,768 | \$74,167 | \$60,948 |
| Average Per Capita Income* | \$27,578 | \$32,402 | \$25,904 |
| Percent of Population Employed | 69 | 74 | 73 |
| Primary Industries Employing Residents | Educational, Health, and Social Services (17%) Professional, Scientific, Management, Administrative and Waste Management Services (12%) Public Administration (12%) | Educational, Health and Social Services (22%) Professional, Scientific, Management, Administrative and Waste Management Services (16%) Public Administration (11%) | Construction (15%) Retail Trade (14%) Educational, Health and Social Services (14%) |
| Primary Occupations Of Residents | Management, Professional, and Related Occupations (41%) Sales and Office Occupations (28%) Service Occupations (13%) | Management, Professional, and Related Occupations (57%) Sales and Office Occupations (24%) Service Occupations (9%) | Management, Professional, and Related Occupations (30%) Sales and Office Occupations (22%) Production, Transportation, and Material Moving Occupations (19%) |

*Income data based on 1999 census sample data

The 2000 U.S. Census data shows 73 percent of the study area is employed. This employment rate is just below that for Howard County (74 percent) and above that for Anne Arundel County (69 percent).

The top industries within the State of Maryland and Anne Arundel and Howard Counties include: educational, health, and social services; professional, scientific, management, administration, and waste management services; and public administration. The top industries within the study area are construction; retail trade; and educational, health, and social services.

The leading occupations among Anne Arundel and Howard County residents are professional, management, business, financial operations, and office and administrative support. The leading occupations among study area residents are management and professional; sales and office; and production, transportation, and material moving.

2. Effects on Regional Employment Characteristics

The No-Build Alternative would not impact regional employment characteristics. The build alternatives would not have a direct impact on the regional economy, but in the long run may have indirect impacts. With easier access to Hanover Road, BWI, and other local roadways in the area, the area's desirability for future commercial and industrial development could increase. The area near Hanover Road between MD 295 and BWI has limited development at this time. A new intersection at Ridge Road could make the area more attractive to commercial development, in keeping with the trend of the local businesses located near BWI and local highways.

3. Effects on Local Employment Characteristics

The build alternatives are expected to effectively increase the LOS of the roadway for the present and predicted future traffic patterns. This increase in LOS would help maintain the economic viability of and opportunity for business growth within the study area. The LOS rating system uses the letters A through F to describe traffic quality. LOS A represents superior traffic quality (very light traffic), while LOS F represents poor traffic quality (congested flow involving various degrees of delay). With the No-Build Alternative, most segments of MD 295 would operate at LOS F for both AM and PM traffic. The roadway capacity improvements associated with the build alternatives would generally allow the affected MD 295 segments to operate at acceptable LOS C/D during peak hours. This change could stimulate area business activity by reducing traffic congestion and increasing the mobility of area residents. The improvements would make it easier for people to get to and from airport and the BWI business district. This is one of the most densely developed areas in Anne Arundel County and provides nearly 20 percent of the jobs in the county (Anne Arundel County 2004). Many businesses have become established, and commercial development is expected to continue to grow. The area currently employs over 10,000 people to serve the needs of BWI, its customers, and other unrelated business and government offices, such as the new MDOT headquarters. The new interchange would also have the potential to enhance access to Arundel Mills Mall.

4. Tax Base

The property tax rates for Anne Arundel and Howard Counties are identified below.

Anne Arundel County

- \$0.918 per \$100 of assessed value of real property

Anne Arundel County estimates that the total revenue for property tax for Fiscal Year 2007 will be \$450.7 million.

Howard County

- \$1.014 per \$100 of assessed value of real property

Howard County estimates that the total revenue for property tax for Fiscal Year 2007 will be \$302.6 million.

C. Land Use

1. Existing and Future Land Use

The predominant existing land uses surrounding the study area are commercial and industrial (40 percent), forest (40 percent), and low- and medium-density residential (11 percent). Most of the residential land occurs in the western portion of the study area in Howard County (Figure III.4), while commercial and industrial lands are primarily associated with BWI to the east, and along MD 100 and MD 176 to the south. Forest lands are prevalent along Deep Run and Stony Run, roughly paralleling MD 295.

Based on mapping provided by Anne Arundel and Howard Counties, patterns of future land use are not expected to be appreciably different than existing patterns (Figure III.5). The BWI Airport Noise Zone, combined with local zoning consistent with Anne Arundel County's BWI/Linthicum Small Area Plan, will limit residential development and promote continued commercial development throughout the eastern two-thirds of the study area (also see Section III.I ICE Analysis, page III-49). This is one of the most densely developed areas in Anne Arundel County and provides nearly 20 percent of the jobs in the county (Anne Arundel County 2004). Many businesses have become established, employing over 10,000 people from the surrounding area, to serve the needs of BWI and its customers. Increased development in this area is primarily driven by the expansion of BWI and the BWI Business District surrounding the airport. A limited amount of residential growth is anticipated around the MD 100 interchange in the southwest portion of the study area.

2. Effects on Land Use

Depending upon the build alternative, conversion of existing land use categories to the Anderson land use/land cover category of Transportation, Communications (antennas, electric and telephone transmission lines, etc.), and Utilities would range between 33 and 37 acres of forest land, 14 and 19 acres of other naturally vegetated land, 8 and 13 acres of residential land, and 6 acres of commercial and industrial land (SHA 2007b). The impacts to land currently owned by the MAA are discussed in Section IV.D (pages IV-6 through IV-20).

The proposed improvements to MD 295 and Hanover Road are consistent with the Anne Arundel County BWI/Linthicum Small Area Plan and the Howard County General Plan. Potential business growth in the area and anticipated increases in traffic congestion are incorporated into the planning process. All proposed improvements are consistent with local land use plans.

3. Compliance with Smart Growth Initiatives

The Smart Growth Initiative requires state-directed funding for highways and economic development to areas designated as Priority Funding Areas (PFAs). The existing crossing of Hanover Road over Deep Run in the Patapsco Valley State Park is the only portion of the project area outside of the PFAs designated by Howard and Anne Arundel Counties. The area outside of the PFA represents less than five percent of the entire project area.

D. Cultural Resources

Identification and evaluation of historic architectural and archeological resources were conducted in accordance with federal and state laws, which protect significant cultural resources. Background research and field surveys were conducted to facilitate identification of cultural resources. An Area of Potential Effect (APE) was delineated in which to identify resources and evaluate the potential impacts of those resources.

All cultural resources identified during the architectural and archeological surveys were evaluated for their eligibility to be included on the National Register of Historic Places (NRHP). The NRHP criteria evaluates the significance of properties based on their integrity, and determine if those properties are associated with broad patterns of our history (Criterion A); or are associated with the lives of persons significant in our past (Criterion B); or that embody the distinctive characteristics of a type, period, or method of construction representing the work of a master, or have artistic value (Criterion C); or that yield information important in prehistory or history (Criterion D) (36 CFR 60.4, and National Register Bulletin No. 15).

All cultural resources identified were documented and submitted to Maryland Historical Trust (MHT) for eligibility determinations or to comment on the need for further evaluation. Correspondence documenting this coordination is included in Table IV-3 (page IV-2) and Appendix B (pages 40 through 54).

1. Historic Standing Structures

“Historic standing structures” refers to any above-ground building, structure, district, or object that attributes to our cultural past. When these resources meet the criteria for listing in the NRHP, they are historic properties that must be considered under the requirements of the National Historic Preservation Act of 1966. The MHT has concurred that there are no NRHP eligible historic standing structures within project’s Area of Potential Effects (APE). The MHT concurrence is provided in Appendix B (page 46).

2. Archeological Resources

Archeological resources relate to evidences of past human occupation that can be used to reconstruct the lifeways of past peoples. These include sites, artifacts, environmental and all other relevant information, as well as the contexts in which they occur. All archeological (prehistoric and historic) sites must be evaluated for their eligibility for the NRHP by the MHT. A Phase I Archeological Survey was conducted from September to November 2006. The APE was defined by the maximum limits of disturbance for the build alternatives. The following information is summarized from the *Phase I Archeological Survey of MD 295 from MD 100 to I-95 and Hanover Road, Anne Arundel and Howard Counties, Maryland* (Emory et al. 2007).

Four previously unrecorded archeological sites (18AN1352, 1347, 1348, and 1353), three previously recorded sites (18HO33, 18AN400 and 18AN1345), and one previously unrecorded Isolated Find (18ANX475) were identified within the APE. Five of those sites 18ANX475, 18AN1345, 1347, 1352, 1353 have been considered ineligible for inclusion in the NRHP, and would not be recommended for additional study. In addition, two sites (18AN245 and 376) in the area of the proposed MD 170 ramps were previously considered ineligible (Kinsey 1978; 1979). Three sites (18HO33, 18AN400, and 18AN1348) were considered potentially eligible. The MHT concurred with the eligibility determinations of the Phase I Archeological Survey on May 15, 2007 (Appendix B, page 54).

A Phase II Archeological Investigation will be conducted for sites 18HO33, 18AN400, and 18AN1348 to assess the extent and integrity of these sites and their eligibility for inclusion in the NRHP. The SHA will continue Section 106 coordination with the MHT as the project progresses.

E. Natural Environment

The following information is summarized from the *MD 295 Natural Environmental Technical Report* (SHA 2007b).

1. Topography, Geology, and Soils

Most of the study area is located in the Western Shore Uplands Region of the Coastal Plain, while the western extreme of the study area in Howard County is in the Piedmont Province. Underlying geology includes Upland Deposits and bedrocks of the Potomac Groups. Topography within the study area tends to include rolling hills and valleys, nearly level land near floodplains, and steep manmade inclines and other surfaces.

Impacts to topography from widening MD 295 within the median would be minimal. Most changes to topography would be associated with the proposed interchange, where elevation adjustments would be required for ramps between Hanover Road and MD 295. No impacts to geology are anticipated with any of the build alternatives.

The study area contains hydric soils, prime farmland soils, and Maryland farmland soils of statewide importance. Direct impacts to soils by build alternatives are summarized in Table III-8.

Table III-8: Potential Impacts (acres) to Hydric, Highly Erodible, and Farmland Soils.

| Classification | Alternative | | | | | |
|--|-------------|-------|-------|-------|-------|-------|
| | 3 | 3A | 4 | 4A | 7 | 8 |
| Hydric Soils | 4.12 | 4.11 | 4.12 | 4.11 | 4.11 | 4.11 |
| Highly Erodible Lands | 32.15 | 36.00 | 33.15 | 36.13 | 36.86 | 35.90 |
| Prime Farmland Soils | 9.49 | 11.20 | 9.77 | 12.03 | 12.35 | 8.95 |
| Farmland Soils of Statewide Importance | 31.26 | 29.66 | 31.45 | 30.05 | 29.63 | 30.10 |

Soils would potentially be impacted during the construction phase through exposure that could promote erosion and sedimentation. Soil types from the Alloway, Evesboro, Galestown, Hambrook, Russett, and Woodstown series have moderate to severe erodibility in places, which may be a limiting factor for construction.

In accordance with the Farmland Protection Policy Act (FPPA), a Farmland Conversion Impact Rating form will be completed for this project and submitted to the Natural Resources Conservation Service in both Anne Arundel and Howard counties.

In accordance with Maryland Department of the Environment (MDE) guidelines, a Sediment and Erosion Control Plan would be developed during the final design phase, and implemented to avoid and/or minimize erosion and sedimentation. Increased runoff from additional impervious surfaces could impact soils, wetlands, and waterways post-construction. The *2000 Maryland Stormwater Design Guidelines* would be used to determine the stormwater management facilities necessary to properly control and treat runoff to prevent impacts associated with increased impervious surfaces. This is discussed more fully for aquatic resources in the next section.

2. Aquatic Resources

The No-Build Alternative would not result in any impacts to aquatic resources; however, each of the build alternatives would impact waterways to some degree. Impacts could include direct impacts due to replacement of bridges and culverts, and indirect impacts related to increased stormwater runoff and contaminants from the roadway.

a) Groundwater and Hydrogeology

The majority of the study area is associated with aquifers in the Potomac Group, a Coastal Plain aquifer. A small section along Hanover Road crosses into the non-Coastal Piedmont and Blue Ridge crystalline aquifer system. Aquifers in the Potomac Group are generally confined and consist of interbedded lenses of sand, gravel, silt, and clay. The piedmont and Blue Ridge crystalline aquifers are generally unconfined to partly confined and consist of schist, gneiss, phyllite, and metamorphosed igneous rock with some quartz. According to the MDE, no designated sole source aquifers are located within or around the study area (personal communication August 23, 2006). A public water supply well that serves the Fleck Machine

Company is located on Ridge Road near the study area (Figure III.6). A wellhead protection zone 1,000 feet in radius has been established around the well.

The No-Build Alternative would not impact groundwater; however, the limits of disturbance for each of the build alternatives would encroach on approximately 7.9 acres of the wellhead protection area that surrounds the well.

b) Water Quality

The study area is located within the Patapsco River Lower North Branch Watershed. This watershed is listed as a Category 3 Waters on the Integrated List of Impaired Surface Water [303(d) list] (MDE 2006). Category 3 Waters have insufficient data to determine appropriate water quality criteria or total maximum daily loads (TMDLs) for a waterway. In addition, the waterways within the study area are designated as Use I Waters. Use I Waters are to be of sufficient quality for “water contact recreation” and “protection of nontidal warmwater aquatic life,” taking into account “existing conditions” and “potential uses that may be made possible by anticipated improvements in water quality.”

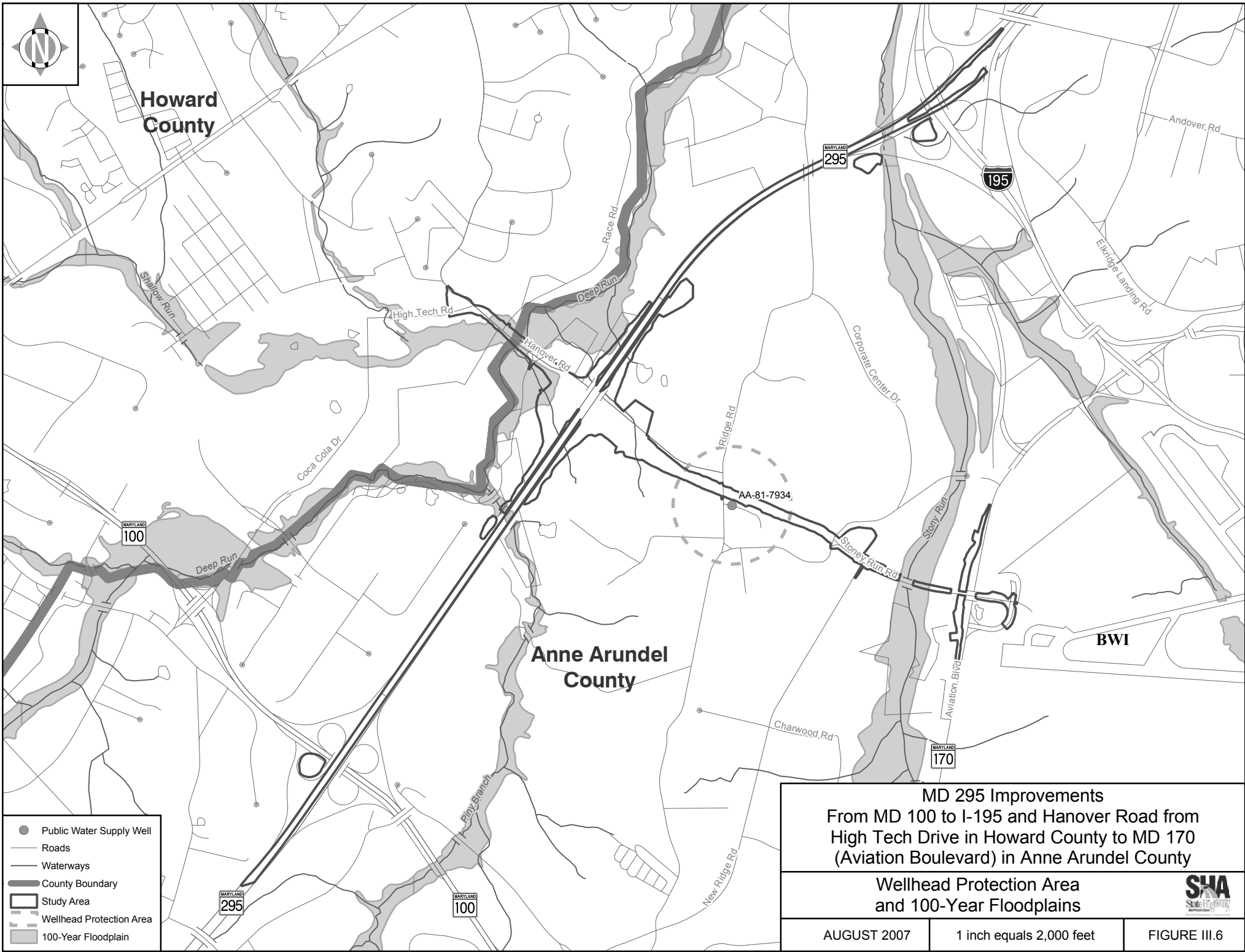
Water quality data for Deep Run, Stony Run, and Piny Run (a tributary to Deep Run) has been collected by the Maryland Biological Stream Survey (MBSS) and Stream Waders. Water quality data from both sources was compiled and assessed for 18 stream sampling stations located upstream and downstream of the study area, generally within 0.5 mile of the project. This data showed that water quality, aquatic habitat, and living resources in all the waterways in the study area have been impacted by development and land use practices, and are typical of sub-watersheds in developed suburban areas throughout the Patapsco Watershed.

Impacts

Construction at and around waterway crossings could cause permanent impacts if existing crossings are widened or reinforced. These impacts would occur through permanent alteration of the stream channel, resulting in alteration of hydrology at the site, as well as further removed in an upstream and/or downstream direction. Such hydrological changes may destabilize the channel and stream banks, increase erosion and sediment loads in the stream, and affect water quality and aquatic habitats that support macroinvertebrates and fish. Temporary impacts to water quality during construction may occur due to dewatering, erosion, or vegetation removal. An increase in impervious surfaces may potentially result in indirect effects on water quality and aquatic biota. The increase in impervious surfaces would range from 27.6 acres for Alternative 3 to 30.7 acres for Alternative 4A (see Table S-1).

Avoidance, Minimization, and Mitigation

Aquatic resources and water quality would be protected by the Use I in-stream work restriction, proper application of an approved Erosion and Sediment Control Plan, and other Best Management Practices (BMPs) that meet the 2000 Maryland Stormwater Design Manual. Generally, no in-stream work is permitted in Use I streams from March 1 to June 15, inclusive, during any year. This restriction protects the spawning and nursery periods of migratory fish. The restriction would be expanded to February 15 to June 15 to protect yellow perch that are known to spawn near the mouths of Deep Run and Stony Run.



Short-term construction impacts and long-term indirect effects related to increased road surfaces and traffic would be minimized by strict adherence to erosion and sediment control procedures. An Erosion and Sedimentation Control Plan would be developed during the final design phase in accordance with MDE guidelines, and implemented to avoid and/or minimize erosion and sedimentation. Appropriate drainage, infiltration, and sedimentation measures would be planned and implemented to minimize disturbance to the area and reduce the risk of contamination to surface waters, as well as the local groundwater table.

Short- and long-term impacts would also be avoided and minimized through strict adherence to the *Maryland Stormwater Management Guidelines for State and Federal Projects*. The stormwater management guidelines became effective on July 1, 2001, and supplement the Stormwater Management Regulations (COMAR 26.17.02) and the *Maryland Stormwater Design Manual, Volumes I and II*. The stormwater management guidelines provide information necessary for submittal of stormwater management plans to the MDE Water Management Administration for review and approval. These regulations would be utilized during the design of the project to accommodate additional stormwater runoff.

The stormwater management approach would be to provide water quality BMPs that meet the 2000 Maryland Stormwater Design Manual, such as infiltration and filtering, open channel, and nonstructural practices. Since the proposed project is within the 4-mile Airport Zone of BWI, the SHA must consider the guidance set forth in FAA Advisory Circular 150/5200-33A, *Hazardous Wildlife Attractants on or Near Airports*, which sets forth criteria for the design of stormwater management facilities and the placement and type of landscaping to deter wildlife attraction (FAA 2004). Early coordination with MAA will be required during the design of any new stormwater management facilities and the landscaping for the proposed project.

Additional avoidance, minimization and mitigation measures will be identified in the final environmental document.

c) “Waters of the United States”

A wetland identification and delineation was conducted from September 2006 to January 2007. Twenty-eight wetlands and 65 waterways were found within the study area (Figures II.1 through II.8). One of the wetlands within the study area, WET 14, has been designated a Non-tidal Wetland of Special State Concern due to the presence of rare, threatened, and endangered plant species (see page III-38 to III-39 for more information).

Impacts

Direct impacts to wetlands (acres) and waterways (linear feet) by each of the build alternatives are summarized in Table III-9 and Table III-10, respectively. Each of the build alternatives would impact 1.26 acres of palustrine emergent wetlands. Impacts to palustrine forested and scrub-shrub wetlands would be approximately 2.2 to 2.5 acres for Alternatives 3, 4 and 7, and 2.8 to 3.0 acres for Alternatives 3A, 4A, and 8. Alternatives 3, 4 and 8 would have lowest impacts to perennial streams (926 to 1,110 linear feet) among the build alternatives. Impacts for Alternatives 3A, 4A, and 7 would range from 1,323 to 1,413 linear feet. In contrast, Alternatives 3 and 4 would have the greatest impacts on intermittent streams (5,549 to 5,817 linear feet) among the alternatives, while Alternative 7 would have the lowest impacts (3,574 linear feet). Impacts to ephemeral stormwater management channels account for approximately 40 percent of the total stream impacts.

Note that a few wetlands and waterways were originally identified and delineated, but subsequently determined to be outside the project limits. These features are included on Figures II.1 through II.8 and are discussed in the *Natural Environment Technical Report* (SHA 2007b), but were not included in Tables III-9 and III-10.

Table III-9: Potential Impacts (acres) to Delineated Wetlands.

| Wetland | Class | Alternative | | | | | |
|---------------------|---------|-------------|-------|-------|-------|-------|-------|
| | | 3 | 3A | 4 | 4A | 7 | 8 |
| WET 2 | PEM | 0.014 | 0.014 | 0.014 | 0.014 | 0.014 | 0.014 |
| WET 3 | PFO | 0.025 | 0.025 | 0.025 | 0.025 | 0.025 | 0.025 |
| WET 4 | PFO | 0.146 | 0.147 | 0.150 | 0.147 | 0.147 | 0.147 |
| WET 5 | PSS/PEM | 0.408 | 0.640 | 0.421 | 0.634 | 0.760 | 0.851 |
| WET 6 | PFO | 0.005 | 0.006 | 0.005 | 0.009 | 0.021 | 0.003 |
| WET 7 | PFO/PEM | 0.780 | 0.489 | 0.775 | 0.513 | 0.000 | 0.454 |
| WET 9 | PEM | 0.017 | 0.017 | 0.017 | 0.017 | 0.000 | 0.017 |
| WET 10 | PFO | 0.024 | 0.032 | 0.046 | 0.043 | 0.000 | 0.018 |
| WET 11 | PFO | 0.000 | 0.000 | 0.000 | 0.039 | 0.000 | 0.043 |
| WET 12 | PFO/PEM | 0.000 | 0.412 | 0.000 | 0.412 | 0.412 | 0.411 |
| WET 14 ¹ | PFO/PEM | 0.109 | 0.109 | 0.109 | 0.109 | 0.109 | 0.109 |
| WET 15 | PEM | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| WET 16 | PEM | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| WET 17 | PSS/PAB | 0.109 | 0.109 | 0.109 | 0.109 | 0.109 | 0.109 |
| WET 18 | PEM | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 |
| WET 19 | PEM | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| WET 20 | PEM | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| WET 21 | PEM | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| WET 22 | PEM | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| WET 26 | PEM | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| WET 27 | PEM | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| WET 28 | PEM | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 |
| WET 29 | PEM | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 |
| WET 32 | PEM | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 |
| WET 34 | PEM | 0.053 | 0.053 | 0.053 | 0.053 | 0.053 | 0.053 |
| WET 35 | PEM | 0.174 | 0.174 | 0.174 | 0.174 | 0.174 | 0.174 |
| WET 36 | PEM | 0.608 | 0.608 | 0.608 | 0.608 | 0.608 | 0.608 |
| WET 37 | PEM | 0.089 | 0.089 | 0.089 | 0.089 | 0.089 | 0.089 |
| WET 38 | PFO | 0.124 | 0.124 | 0.124 | 0.124 | 0.124 | 0.124 |
| WET 39 | PFO/POW | 0.436 | 0.436 | 0.436 | 0.436 | 0.436 | 0.436 |
| WET 40 | PFO/PEM | 0.132 | 0.132 | 0.132 | 0.132 | 0.132 | 0.132 |
| WET 41 | PFO/PEM | 0.169 | 0.169 | 0.169 | 0.169 | 0.169 | 0.169 |
| WET 42 | PEM | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 |
| WET 43 | PEM/POW | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 |
| Total PEM | | 1.483 | 1.482 | 1.482 | 1.482 | 1.465 | 1.482 |
| Total PSS | | 0.529 | 0.761 | 0.542 | 0.755 | 0.881 | 0.973 |
| Total PFO | | 1.672 | 1.803 | 1.693 | 1.881 | 1.298 | 1.793 |
| Grand Total | | 3.684 | 4.046 | 3.718 | 4.118 | 3.644 | 4.248 |

¹ Non-tidal Wetland of Special State Concern

Table III-10: Potential Impacts (linear feet) to Delineated Waterways

| Waterway | Classification | Alternative | | | | | |
|-----------------------|------------------------|-------------|-----|------|-----|-----|-----|
| | | 3 | 3A | 4 | 4A | 7 | 8 |
| Deep Run Subwatershed | | | | | | | |
| WUS 1 | Perennial | 220 | 220 | 220 | 220 | 220 | 220 |
| WUS 2 | Perennial | 56 | 56 | 56 | 56 | 56 | 56 |
| WUS 3 | Ephemeral ¹ | 232 | 232 | 232 | 232 | 232 | 232 |
| WUS 6 | Ephemeral ² | 31 | 31 | 31 | 31 | 31 | 31 |
| WUS 7 | Ephemeral ² | 34 | 34 | 34 | 34 | 34 | 34 |
| WUS 12 | Perennial | 433 | 809 | 412 | 854 | 899 | 596 |
| WUS 13 | Ephemeral ¹ | 41 | 38 | 41 | 42 | 42 | 54 |
| WUS 14 | Ephemeral ¹ | 58 | 67 | 58 | 74 | 68 | 0 |
| WUS 17 | Intermittent | 357 | 352 | 382 | 351 | 222 | 389 |
| WUS 18 | Intermittent | 312 | 297 | 321 | 296 | 199 | 298 |
| WUS 19 | Intermittent | 279 | 348 | 328 | 315 | 141 | 355 |
| WUS 20 | Intermittent | 1259 | 851 | 1442 | 889 | 389 | 667 |
| WUS 21 | Ephemeral ² | 0 | 0 | 18 | 22 | 0 | 32 |
| WUS 22 | Ephemeral ² | 106 | 106 | 106 | 106 | 0 | 106 |
| WUS 23 | Ephemeral ¹ | 739 | 739 | 739 | 739 | 210 | 236 |
| WUS 24 | Ephemeral ¹ | 0 | 0 | 110 | 109 | 0 | 0 |
| WUS 25 | Ephemeral ¹ | 0 | 84 | 84 | 79 | 0 | 84 |
| WUS 26 | Ephemeral ¹ | 114 | 114 | 114 | 114 | 114 | 114 |
| WUS 27 | Ephemeral ¹ | 64 | 64 | 64 | 64 | 64 | 64 |
| WUS 28 | Ephemeral ¹ | 54 | 54 | 54 | 54 | 54 | 54 |
| WUS 29 | Ephemeral ¹ | 212 | 212 | 212 | 212 | 138 | 149 |
| WUS 30 | Intermittent | 197 | 248 | 198 | 248 | 248 | 249 |
| WUS 31 | Ephemeral ² | 101 | 0 | 101 | 0 | 0 | 0 |
| WUS 32 | Intermittent | 788 | 0 | 788 | 0 | 0 | 0 |
| WUS 34 | Ephemeral ¹ | 121 | 121 | 121 | 121 | 121 | 121 |
| WUS 35 | Ephemeral ¹ | 37 | 37 | 37 | 37 | 37 | 37 |
| WUS 38 | Ephemeral ¹ | 137 | 137 | 137 | 137 | 137 | 137 |
| WUS 39 | Ephemeral ¹ | 244 | 244 | 244 | 244 | 244 | 244 |
| WUS 47 | Intermittent | 119 | 119 | 119 | 119 | 119 | 119 |
| WUS 48 | Ephemeral ¹ | 111 | 111 | 111 | 111 | 111 | 111 |
| WUS 49 | Ephemeral ¹ | 294 | 294 | 294 | 294 | 294 | 294 |
| WUS 50 | Intermittent | 142 | 142 | 142 | 142 | 142 | 142 |
| WUS 51 | Ephemeral ¹ | 216 | 216 | 216 | 216 | 216 | 216 |
| WUS 52 | Intermittent | 125 | 125 | 125 | 125 | 125 | 125 |
| WUS 53 | Ephemeral ¹ | 106 | 106 | 106 | 106 | 106 | 106 |
| WUS 54 | Ephemeral ¹ | 159 | 159 | 159 | 159 | 159 | 159 |
| WUS 69 | Ephemeral ² | 112 | 112 | 112 | 112 | 112 | 112 |
| WUS 72 | Ephemeral ² | 254 | 254 | 254 | 254 | 254 | 254 |

Ephemeral¹ = stormwater management channel; Ephemeral² = natural channel; ³ Unclassified culverts convey waterways that were not classified according to the Cowardin System.

Table III-10, continued: Potential Impacts (linear feet) to Delineated Waterways

| Waterway | Classification | Alternative | | | | | |
|------------------------|------------------------|-------------|-----|-----|-----|-----|-----|
| | | 3 | 3A | 4 | 4A | 7 | 8 |
| Piny Run Subwatershed | | | | | | | |
| WUS 15 | Ephemeral ¹ | 0 | 0 | 0 | 0 | 105 | 0 |
| WUS 16 | Intermittent | 0 | 0 | 0 | 0 | 17 | 0 |
| WUS 40 | Ephemeral ¹ | 48 | 48 | 48 | 48 | 48 | 48 |
| WUS 41 | Ephemeral ¹ | 921 | 921 | 921 | 921 | 921 | 921 |
| WUS 42 | Ephemeral ¹ | 125 | 125 | 125 | 125 | 125 | 125 |
| WUS 43 | Ephemeral ¹ | 97 | 97 | 97 | 97 | 97 | 97 |
| WUS 44 | Ephemeral ¹ | 454 | 454 | 454 | 454 | 454 | 454 |
| WUS 45 | Ephemeral ¹ | 78 | 78 | 78 | 78 | 78 | 78 |
| WUS 46 | Ephemeral ² | 114 | 114 | 114 | 114 | 114 | 114 |
| WUS 70 | Ephemeral ² | 34 | 34 | 34 | 34 | 34 | 34 |
| WUS 81 | Perennial | 137 | 137 | 137 | 137 | 137 | 137 |
| WUS 88 | Intermittent | 486 | 486 | 486 | 486 | 486 | 486 |
| Stony Run Subwatershed | | | | | | | |
| WUS 33 | Intermittent | 228 | 228 | 228 | 228 | 228 | 228 |
| WUS 37 | Ephemeral ¹ | 257 | 257 | 257 | 257 | 257 | 257 |
| WUS 55 | Ephemeral ¹ | 11 | 11 | 11 | 11 | 11 | 11 |
| WUS 56 | Intermittent | 719 | 719 | 719 | 719 | 719 | 719 |
| WUS 57 | Ephemeral ¹ | 104 | 104 | 104 | 104 | 104 | 104 |
| WUS 58 | Ephemeral ¹ | 89 | 89 | 89 | 89 | 89 | 89 |
| WUS 59 | Ephemeral ² | 261 | 261 | 261 | 261 | 261 | 261 |
| WUS 60 | Ephemeral ² | 273 | 273 | 273 | 273 | 273 | 273 |
| WUS 62 | Ephemeral ² | 79 | 79 | 79 | 79 | 79 | 79 |
| WUS 63 | Ephemeral ² | 52 | 52 | 52 | 52 | 52 | 52 |
| WUS 64 | Ephemeral ² | 300 | 300 | 300 | 300 | 300 | 300 |
| WUS 65 | Ephemeral ² | 154 | 154 | 154 | 154 | 154 | 154 |
| WUS 66 | Ephemeral ¹ | 92 | 92 | 92 | 92 | 92 | 92 |
| WUS 67 | Perennial | 101 | 101 | 101 | 101 | 101 | 101 |
| WUS 68 | Ephemeral ¹ | 372 | 372 | 372 | 372 | 372 | 372 |
| WUS 71 | Intermittent | 69 | 69 | 69 | 69 | 69 | 69 |
| WUS 77 | Ephemeral ² | 63 | 63 | 63 | 63 | 63 | 63 |
| WUS 79 | Ephemeral ¹ | 171 | 171 | 171 | 171 | 171 | 171 |
| WUS 80 | Ephemeral ¹ | 82 | 82 | 82 | 82 | 82 | 82 |
| WUS 84 | Ephemeral ² | 283 | 283 | 283 | 283 | 283 | 283 |
| WUS 85 | Ephemeral ² | 11 | 11 | 11 | 11 | 11 | 11 |
| WUS 86 | Intermittent | 486 | 486 | 486 | 486 | 486 | 486 |

Ephemeral¹ = stormwater management channel; Ephemeral² = natural channel; ³ Unclassified culverts convey waterways that were not classified according to the Cowardin System.

Table III-10, continued: Potential Impacts (linear feet) to Delineated Waterways

| Classification | Alternative | | | | | |
|------------------------------------|-------------|--------|--------|--------|--------|--------|
| | 3 | 3A | 4 | 4A | 7 | 8 |
| Total Perennial | 947 | 1,323 | 926 | 1,368 | 1,413 | 1,110 |
| Total Intermittent | 5,549 | 4,453 | 5,817 | 4,456 | 3,574 | 4,316 |
| Total Ephemeral ¹ | 5,838 | 5,925 | 6,029 | 6,040 | 5,348 | 5,308 |
| Total Ephemeral ² | 2,262 | 2,160 | 2,278 | 2,182 | 2,054 | 2,192 |
| Unclassified Culverts ³ | 373 | 373 | 373 | 373 | 373 | 373 |
| Grand Total | 14,986 | 14,250 | 15,050 | 14,436 | 12,850 | 13,315 |

Ephemeral¹ = stormwater management channel; Ephemeral² = natural channel; ³ Unclassified culverts convey waterways that were not classified according to the Cowardin System.

Avoidance, Minimization, and Mitigation

Other than the No-Build Alternative, two avoidance options were considered. One avoidance option would route traffic through the MD 100 interchange instead of widening Hanover Road through the Patapsco Valley State Park. The other avoidance option included the construction of a new interchange, with improvements to Hanover Road being restricted to the area east of crossing over Deep Run.

The SHA evaluated these avoidance options and found that they would not fully address the purpose and need for the project. They would not provide capacity in support of anticipated increases in residential and commercial traffic in Howard and Anne Arundel counties, an element of the purpose and need. Both Howard and Anne Arundel counties would like Hanover Road improved to four lanes to serve as a secondary emergency roadway and to provide a secondary access to BWI. Moreover, it is projected that the unimproved western portion of Hanover Road would continue to carry the majority of local traffic seeking access to the new interchange, based on the existing level of congestion and near failing conditions at the MD 100/MD 295 interchange. The MD 100/MD 295 interchange is currently operating at a LOS D/E for the northbound weave and a LOS F/D for the southbound weave. MD 295 within the interchange is currently operating at as LOS D/D for the northbound lanes and a LOS E/C for the southbound lanes. By the year 2030, the MD 100/MD 295 interchange will operate at a LOS E/F for the northbound weave and a LOS F/E for the southbound weave. In addition to not fully addressing the purpose and need, the avoidance options would not correct the existing substandard deficiencies on Hanover Road that include flooding during heavy rains and the lack of sidewalks. The lack of sidewalks is inconsistent with the Americans with Disabilities Act (ADA) standards in terms of logical connections. Furthermore, the avoidance options would not provide a trail connection between the BWI Trail and surrounding area and the Patapsco Valley State Park and points west.

A minimization option would involve reducing the typical section of Hanover Road to two bicycle compatible lanes without a median, a ten foot hiker biker trail on the north side, and a five foot sidewalk on the south side. While this minimization option would correct the existing substandard deficiencies on Hanover Road, it would not provide the four lanes that both Howard and Anne Arundel counties desire. Furthermore, reduction of the typical section would require Hanover Road to be closed for long periods of time during construction, whereas the alternatives retained for detailed study would not require closure. Long periods of complete closure would

be undesirable because Hanover Road is used by Anne Arundel and Howard county emergency service providers.

In a letter dated August 1, 2006, the COE suggested an additional minimization option that would involve reducing the median width on Hanover Road to further reduce environmental impacts (Appendix B, page 11). The SHA has evaluated the option and will reduce the median width to 18 feet in the Preferred Alternative/Conceptual mitigation package, as indicated in a letter to the COE dated June 27, 2007 (Appendix B, page 12).

Approximately 50 percent of the total waterway impacts are associated with ephemeral, stormwater management channels. Many of the waterways within the study area are conveyed beneath MD 295 in culverts. Some of these are daylighted within the median, while others are not. Widening MD 295 within the median, rather than to the outside, would significantly reduce impacts to these waterways.

The SHA has examined wetland avoidance and minimization measures. The proposed roadway was altered to completely avoid impacts to WET 2 and a MAA wetland mitigation site adjacent to Hanover Road. As a result of coordination between the SHA and COE, impacts to wetlands in the northeast quadrant of the proposed interchange were avoided by shifting the Hanover Road alignment south as proposed by Alternatives 3A, 4A, 7, and 8. Finally, an adjustment of slopes to 2:1 reduced impacts to the large Wetland of Special State Concern bordering Stoney Run Road. As this project progresses toward final design, additional avoidance and minimization measures would be evaluated and implemented for any impacted wetlands and waterways. Additional minimization measures could include the use of steeper roadway embankments, perpendicular crossings for waterways, and the use of bridges rather than closed systems (i.e., culverts).

Mitigation for wetlands could involve creating wetlands of comparable function and value to those impacted by construction, or restoration and/or enhancement of existing wetlands. Mitigation for waterways could involve creation or restoration of waterways, creation or enhancement of riparian buffers, and/or removal of fish passage impediments and creation or enhancement of fish habitat. A mitigation site search will be conducted during Stage II of project planning, and summarized in the final document for this project. Mitigation would be targeted on-site; however, if on-site mitigation is not available, off-site mitigation would occur.

Since the proposed project is within the 4-mile Airport Zone of BWI, the SHA must consider the guidance set forth in FAA Advisory Circular 150/5200-33A, *Hazardous Wildlife Attractants on or Near Airports*, which sets forth criteria for the location and the design of wetland mitigation projects to deter deer attraction. Early coordination with MAA will be required during the location and design of any proposed wetland mitigation areas within the 4-mile Airport Zone of BWI.

3. Floodplains

Based on a review of the Federal Emergency Management Agency (FEMA) maps for Anne Arundel and Howard Counties, 100-year floodplains occur along Deep Run, Stony Run, and Piny Run, the three primary perennial waterways in the study area (Figure III.6).

a) Impacts

The No-Build Alternative would not result in any impacts to floodplains; however, each of the build alternatives would impact floodplains to some degree. Impacts to floodplains for each build alternative are summarized in Table III-11. Potential impacts would occur primarily along the Deep Run floodplains. Impacts could include direct impacts due to replacement or modification of bridges and culverts, and encroachment onto the floodplain. Construction within floodplains can affect drainage patterns and floodwater control during and after storm events.

Table III-11: Potential Impacts (acres) to 100-Year Floodplains.

| | Alternative | | | | | |
|-----------------|-------------|------|------|------|------|------|
| | 3 | 3A | 4 | 4A | 7 | 8 |
| Acres of Impact | 6.39 | 6.64 | 6.47 | 6.97 | 8.42 | 6.97 |

b) Avoidance, Minimization, and Mitigation

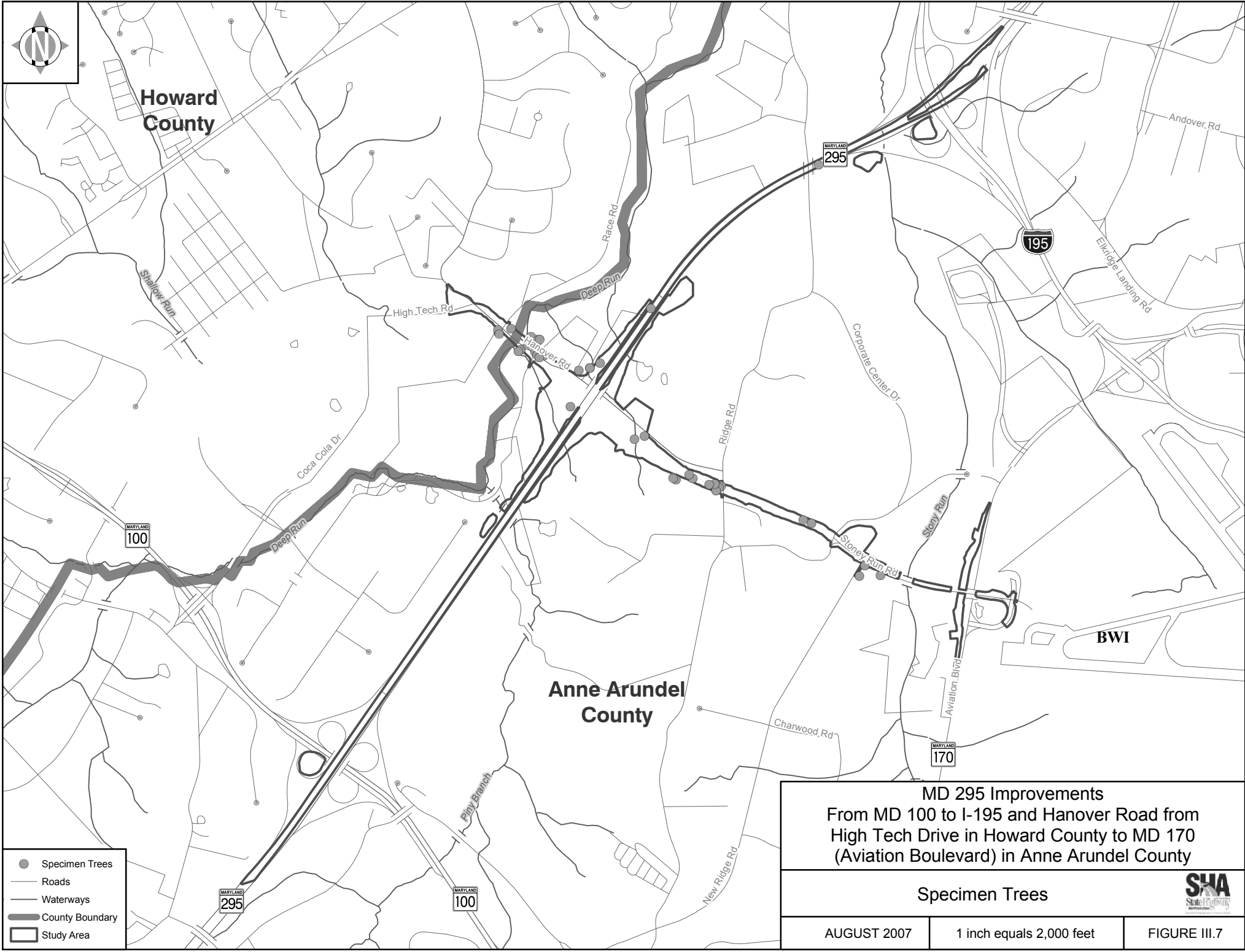
The widening of MD 295 and Hanover Road would be limited to improvements to existing roads that cross stream channels perpendicularly, and none of the build alternatives would result in longitudinal floodplain encroachments. Floodplain avoidance was evaluated during the preliminary design stages of each of the build alternatives. Complete avoidance was not possible due to the existing road configurations. Exact amounts of cut or fill and the potential effects of modifying bridges and extending culverts would be determined during the final design.

4. Vegetation and Wildlife

a) Existing Conditions

The study area is located within a rural to suburban area that is experiencing rapid commercial and transportation development. Existing plant communities and wildlife habitats were evaluated by an Anderson land use/land cover analysis, supplemented by field surveys of wetlands and waterways, specimen trees, and rare, threatened, and endangered plant species during which wildlife species were noted. Specimen trees have a diameter of 30 inches or greater, measured 4.5 feet above the ground, or a diameter 75% or more of the diameter of the current state champion tree. Existing vegetation includes a mix of residential plantings and landscapes species, old fields previously cleared for agriculture or planted as tree farms, and deciduous and mixed second-growth woodlands. Twenty-four specimen trees were found within the study area. An additional 14 specimen trees were found in close proximity to the study area. The locations of specimen trees are shown on Figure III.7.

The project area contains wildlife typical of a rural-suburban area. Typical species include songbirds and small birds of prey, whitetail deer, red fox, and small mammals adapted to a human environment, such as groundhogs, raccoons, and opossums.



Map Document: X:\Projects\Road Mapping\EA\Fig\17 Specimen Trees.mxd
2/2/2007 10:44:43 AM

b) Impacts

Twenty-one specimen trees would be directly impacted by Alternatives 7 and 8, and 22 specimen trees would be impacted by Alternatives 3, 3A, 4, and 4A. The No-Build Alternative would not impact existing vegetation and wildlife. The build alternatives would convert varying amounts of forest, old field, and commercial/industrial land uses into transportation land uses.

Commercial/industrial areas typically contain relatively high amounts of impervious surfaces, and provide little value to wildlife. In contrast, forest and agricultural areas provide greater habitat value for wildlife since they contain more food and cover, and less impervious surface.

Conversion of existing terrestrial land use/land cover types to transportation alternatives would range from 33 to 37 acres for forest land depending on the build alternative. The MD 295 project proposes improvements along or adjacent to existing alignments, and most of the vegetation and wildlife impacts would occur in roadway medians (MD 295), or along the edges of existing roadways (Hanover Road), as opposed to forest interior or other undisturbed habitats that would be affected by a newly-proposed roadway alignment.

c) Avoidance, Minimization, and Mitigation

The project would comply with applicable laws and regulations regarding forest impacts. Maryland's Natural Resources Article 5-103, *Reforestation Law*, adopted 1989, amended 1990 and 1991, requires that the construction of a highway by a unit of the State:

- May cut or clear only the minimum number of trees and other woody plants that are necessary and consistent with sound design practices, and
- Shall make every reasonable effort to minimize the cutting or clearing of trees and other woody plants.

The *Reforestation Law* also requires the replacement, on public land, of removed wooded areas or contribution to the State Reforestation Law Fund. These mitigation measures are required on an acre-for-acre (1:1) basis for impacts to one acre or more of forest.

5. Rare, Threatened, and Endangered Species

The MD DNR Wildlife and Heritage Service and the U.S. Fish and Wildlife Service (USFWS) were contacted to determine if any rare, threatened or endangered species are located within the study area. No rare, threatened or endangered animal species are known to occur within the study area. Six state and one federal rare, threatened, or endangered plant species are known to occur in the vicinity of the study area (Table III-12).

Table III-12. List of Plant Species and Their Status

| Scientific Name (common name) | Status |
|--|---|
| <i>Helonias bullata</i> (swamp pink) | State Endangered & Federally Threatened |
| <i>Polanisia dodecandra</i> (clammyweed) | State Endangered |
| <i>Thelypteris simulata</i> (bog fern) | State Threatened |
| <i>Smilax pseudo-china</i> (halberd-leaved greenbrier) | State Threatened |
| <i>Arundinaria gigantea</i> (giant cane) | State Rare |
| <i>Juglans cinerea</i> (butternut) | State Rare |

Surveys for the target plant species were conducted from May through August 2006. Five different occurrences of bog fern were documented, and potential habitat was found in other portions of the study area. All documented bog fern occurrences were relatively close to, but outside the limits of disturbance for each of the build alternatives.

a) Impacts

None of the build alternatives would result in direct impacts to rare, threatened, or endangered plants. However, all of the build alternatives could potentially have indirect impacts on the bog fern as a result of impacts to the wetlands that support the plants. The ROW impacts in the vicinity of the bog fern are sliver takes, totaling approximately 0.2 acre, along an existing roadway.

b) Avoidance, Minimization, and Mitigation

Impact avoidance/minimization measures during project design included the use of 2:1 slopes, which moved limits of disturbance for each of the build alternatives away from the bog fern occurrences. Additional avoidance and minimization measures for potential indirect impacts will be coordinated with the MD DNR as project planning proceeds. A report documenting the surveys conducted and locations of rare, threatened or endangered plants was provided to the MD DNR Wildlife and Heritage Service, as well as the MD DNR Resource Planning Program, Central Region Planning Office regarding survey results in portions of Patapsco Valley State Park. The MD DNR Wildlife and Heritage Service responded to the SHA in a letter dated July, 9, 2007 (Appendix B, page 28). The SHA will continue to coordinate with the DNR to avoid and minimize indirect impacts to bog fern habitat.

F. Air Quality

The project-level air quality analysis was conducted in accordance with the U.S. Environmental Protection Agency (EPA), FHWA, and SHA guidelines. Refer to the *MD 295 Air Quality Technical Report* (SHA 2007c) for details on the technical analysis and its components.

1. Carbon Monoxide Micro-scale Evaluation

Carbon monoxide (CO) predictions were analyzed as the accepted indicator for vehicle induced air pollution. Air quality analyses utilized the MOBILE 6.2 emissions factor model and CAL3QHC dispersion model to predict worst-case CO concentrations for the existing year (2004 data) and the design year (2030). These models predict current and future air quality impacts based on CO pollutant concentrations at a variety of sites in the project corridor. Computer modeled one-hour concentration levels were calculated to include background concentrations and were used to derive the eight-hour concentration levels, which were then compared to the National Ambient Air Quality Standards (NAAQS). The objective of this analysis is to consider the effects of the project on the local ambient air quality relative to the NAAQS. Air quality is assessed to determine whether the proposed transportation improvement project conforms to the 1990 Clean Air Act Amendments (CAAA) and the Maryland State Implementation Plan (SIP).

A total of 69 receptors were used to predict both free-flow and idling condition worst-case CO concentrations for the existing environment and each of the alternatives in the project area.

These receptors were selected to represent areas of possible human use at or near the facility, as well as sites in close proximity to intersections that produce worst-case concentration levels.

The air quality modeling analysis evaluated worst-case traffic conditions for the existing facility (2004), Alternative 1 No-Build (2030), and the six build alternatives (2030) retained for detailed study. The analysis indicates that the eight-hour concentration of CO will not exceed the NAAQS of 9.0 ppm (parts per million) at any sites within the project area for any of the design alternatives, including the existing facility and No-Build Alternative.

The maximum calculated one-hour and eight-hour CO concentrations are as follows:

- Existing facility: One hour = 5.2 ppm, eight-hour = 3.7 ppm
- Alternative 1 (No-Build): One hour = 5.9 ppm, eight-hour = 4.1 ppm
- Alternatives 3 and 3A: One hour = 4.6 ppm, eight-hour = 3.2 ppm
- Alternatives 4 and 4A: One hour = 4.6, eight-hour = 3.2 ppm
- Alternative 7: One hour = 4.6 ppm, eight-hour = 3.2 ppm
- Alternative 8: One hour = 4.6 ppm, eight-hour = 3.2 ppm

Although CO concentrations are typically anticipated to decrease in the future due to lower fleet emissions, the relatively steady-state of CO emissions in both the existing and future case for this project are due to anticipated increases in traffic volumes and the effects of traffic queuing on local roadway intersections along common areas of Hanover Road that are expected to see a significant increase in daily traffic.

2. PM_{2.5} Regional and Hot-Spot Conformity Determination

The analysis of fine particulate matter (PM_{2.5}) was conducted as part of an air quality technical analysis for the MD 295 project. Please refer to the MD 295 Air Quality Technical Report (SHA 2007c) for details on the technical analysis and its components.

The MD 295 Project is located in Howard and Anne Arundel Counties, Maryland. Both counties are listed as not in “non-attainment” with the NAAQS for carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. Howard and Anne Arundel Counties are listed as “moderate non-attainment” relative to the NAAQS for eight-hour ozone and “non-attainment” relative to PM_{2.5} (particulate matter 2.5 microns or smaller in size) and are therefore subject to conformity with the SIP. Conformity to the SIP is determined through regional air quality analyses of the Transportation Improvement Plan (TIP), typically performed through the local Metropolitan Planning Organization. This project demonstrates conformity with the SIP as it was included as part of Maryland’s approved 2007-2011 TIP (TIP Project Reference# 61-051-41).

Projects that require hotspot analysis of PM_{2.5} are those projects that are Projects of Air Quality concern as outlined in 40 CFR 03.123 (b)(1):

- (i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- (ii) Projects affecting intersections that are Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to a Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

- (iii) New bus and rail terminal and transfer points that have a significant number of diesel vehicles congregating at a single location;
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM₁₀ or PM_{2.5} applicable implementation plan submission, as appropriate, as sites of violation or possible violation.

Based on review and analysis of the proposed MD 295 project, it has been determined that the project is not a project of air quality concern under 40 CFR 93.109. The following analysis is offered to support this designation:

- The MD 295 project does not meet the criteria set forth in 40 CFR 93.123(b)(1) as amended to be considered a **project of air quality concern** because the project corridor is primarily used by gasoline vehicles. Referencing the EPA's March 2006 Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas (EPA420-B-06-902), Appendix A indicates that in order to be considered a project of air quality concern, a project would require average annual daily traffic (AADT) in excess of 125,000 vehicles and a diesel truck percentage in excess of 10%. As outlined in Table III-13, AADT on the MD 295 mainline will exceed the AADT threshold in the build scenario, but fall well short of the requisite 10% diesel truck component. Anticipated Hanover Road AADTs are well below the 125,000 threshold with corresponding diesel truck percentages well below 10%.

Table III-13: Percent of Diesel Powered Traffic and Average Annual Daily Traffic (AADT) for the Existing (2004), Year 2030 No-Build, and Year 2030 Build Conditions on the MD 295 Mainline Between MD 100 and I-195 and Hanover Road.

| Project Area | Existing | Year 2030 No-Build | Year 2030 Build |
|-------------------------|----------|--------------------|-----------------|
| MD 295 Mainline | | | |
| Percent Diesel | 3.09% | 3.09% | 3.09% |
| AADT | 84,850 | 118,300 | 130,900 |
| Hanover Road | | | |
| Percent Diesel | 6.27% | 6.27% | 6.27% |
| AADT, by Segment | | | |
| East of Interchange | 1,200 | 5,175 | 33,050 |
| New Extension | -- | -- | 26,350 |
| Stoney Run Road | 12,250 | 32,600 | 19,700 |

- As discussed in the examples to the preamble to the March 10, 2006 Final Rule for PM₁₀ and PM_{2.5} Hot Spot Analyses in Project-Level Transportation Conformity Determination (71FR12491), 40 CFR 93.123(b)(1)(i) has been interpreted as applying only to projects involving a significant increase in the number of diesel transit buses and diesel trucks for new or expanded highway projects. This is consistent with 40 CFR 93.123(b)(1)(iv) which defines projects of air quality concern based on a significant increase in diesel

vehicles due to terminal or transfer project expansion. As discussed below, the AADT on the MD 295 mainline will vary by approximately 10% between the build and no-build scenarios, with static diesel truck percentages anticipated.

- The Hanover Road section of the project warrants additional consideration. The peak 2030 No-Build volume in the Hanover Road/Stoney Run Road corridor is 32,600 vehicles per day, predicted to occur on the Stoney Run Road portion of the corridor between New Ridge Road and MD 170 (Table III-13). In the 2030 Build scenario, the peak volume is 33,050 vehicles per day (a 1.4% increase) which would occur on Hanover Road immediately east of the proposed interchange. In addition, the newly proposed extension of Hanover Road between Ridge Road and Old Stoney Run Road would have a volume of 26,350 vehicles per day, lower than the No-Build peak level of 32,600 vehicles per day. Moreover, traffic volume on Stoney Run Road between New Ridge Road and MD 170, the peak section in No-Build scenario, would be reduced to 19,700 vehicles per day in Build scenario. The relatively small increase in traffic along the Hanover Road is not sufficient to warrant its consideration as a project of air quality concern.
- Section 176(c) of the CAA and the federal conformity rule requires that transportation plans and programs conform to the intent of the state air quality implementation plan (SIP) through a regional emissions analysis in PM_{2.5} non-attainment areas. Howard and Anne Arundel counties are both located in the Baltimore, MD PM_{2.5} area.

Conclusion

Based on review and analysis of the proposed MD 295 Project Planning Study, it has been determined that the project meets the CAA and 40 CFR 93.109 requirements. These requirements are met for particulate matter without a project level hot-spot analysis since the project has ***not been found to be a project of air quality concern*** as defined under 40 CFR 93.123(b)(1). Since the project meets the CAA and 40 CFR 93.109 requirements, the project will not cause or contribute to a new violation of the PM_{2.5} National Ambient Air Quality Standards, or increase the frequency or severity of a violation.

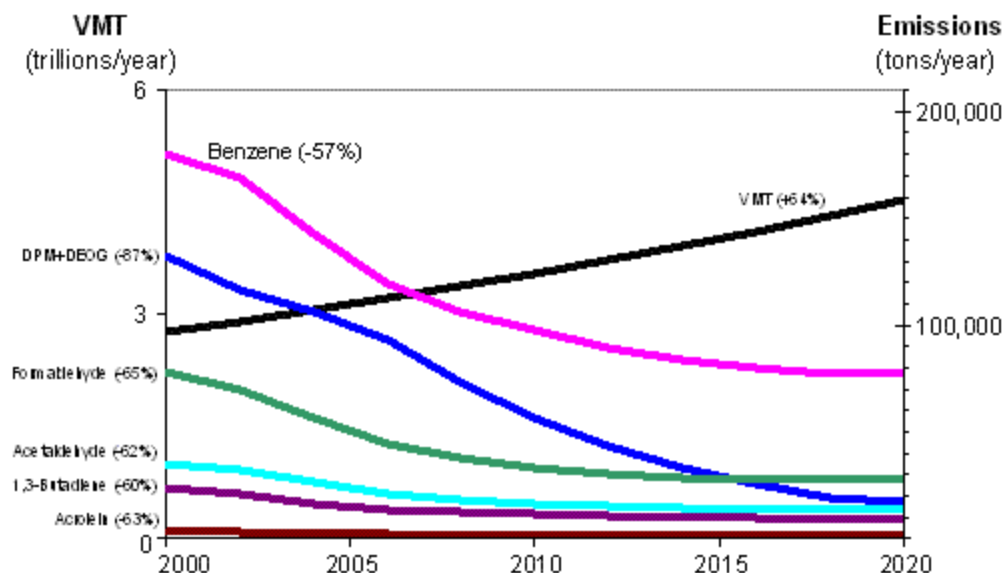
The project area falls under the jurisdiction of the Baltimore Regional Transportation Board (BRTB). The BRTB is the federally recognized Metropolitan Planning Organization for transportation planning in the Baltimore Region. Members of the Baltimore Metropolitan Council (BMC) Board serve on the BRTB, and the BMC provides technical and staff support to the BRTB. Anne Arundel and Howard counties are both considered to be in “non-attainment” for PM_{2.5}. The BRTB approved the 2007-2011 TIP and the 2004 Baltimore Regional Transportation Plan on August 22, 2006, and has concluded that the region’s transportation plan and program are in conformity with the SIP relative to air quality goals. Therefore, the MD 295 project has been included in a conforming plan and program in accordance with 40 CFR 93.115. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93.

3. Mobile Source Air Toxics Analysis

FHWA *Guidance on Air Toxic Analysis in NEPA Documents*, requires analysis of Mobile Source Air Toxics (MSAT) under specific conditions. The EPA has designated six prioritized MSATs which are known or probable carcinogens, or can cause chronic respiratory effects. The six prioritized MSATs are: Benzene, Acrolein, Formaldehyde, 1,3-Butadiene, Acetaldehyde, and Diesel Exhaust (Diesel Exhaust Gases and Diesel Particulate Matter). The MD 295 project would be considered in the category: “**Projects with Low Potential MSAT Effects**”, as described in the referenced guidance. An example of this type of project is a minor widening project and new interchanges, where design year traffic (AADT) is not projected to exceed 150,000. Projects in this category may require a qualitative MSAT analysis.

For each alternative, the amount of MSATs emitted would be proportional to the vehicle miles traveled (VMT), assuming that other variables such as fleet mix are the same. The VMT estimated for the build alternative will be higher than the No-Build alternative because the additional access to Hanover Road via the proposed MD 295 interchange may attract re-routed trips from elsewhere in the transportation network. This could lead to an increase in VMT that would lead to higher MSAT emissions for the action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is also offset somewhat by lower MSAT emission rates due to increased speeds, because according to EPA’s MOBILE 6.2 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. In addition, construction of interchanges to replace at-grade intersections will reduce idling, thereby reducing emissions. Furthermore, at both the project location and regionally, MSAT concentrations will decrease in future years due to EPA’s vehicle emission and fuel regulations. Refer to the figure below.

U.S. Annual Vehicle Miles Traveled (VMT) vs. Mobile Source Air Toxics Emissions, 2000-2020



Source: Memorandum - Interim Guidance on Air Toxic Analysis in NEPA Documents, US Department of Transportation, Federal Highway Administration, February 2006.

Included herein is a basic analysis of the likely MSAT emission impacts of this project. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the build alternatives. Due to these limitations, the following discussion is included in accordance with the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

- Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.
- The EPA tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. The tools to predict how MSATs disperse are also limited. Even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude reaching meaningful conclusions about project-specific health impacts. Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses. The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants.
- As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions if any from the build alternatives.

In summary, under any build alternative in the design year, it is expected there would be reduced MSAT emissions in the immediate area of the project, relative to the No-Build alternative, due to the EPA MSAT reduction programs and reduced VMT associated with more direct routing. In comparing various project alternatives, MSAT levels could be higher under the build alternatives than the No-Build Alternative. However, as discussed above, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be accurately quantified due to the inherent deficiencies of current models. In addition, on a regional basis, the EPA vehicle and fuel regulations coupled with fleet turnover will cause region-wide MSAT levels to be significantly lower than today in almost all cases.

G. Noise

This project-level traffic noise analysis has been completed in accordance with FHWA and SHA guidelines, including Title 23 of the CFR, Part 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (23 CFR, Part 772) and the MDOT – SHA *Sound Barrier Policy* (May 1998). Refer to the *MD 295 Traffic Noise Technical Report* (SHA 2007d) for a detailed discussion of the component portions of the traffic noise analysis.

1. Noise Abatement Criteria and Noise Sensitive Areas

Noise abatement criteria (NAC) for various land uses have been established by FHWA in 23 CFR, Part 772 and the SHA *Sound Barrier Policy*. These categories and criteria are presented in Table III-14. The noise abatement criterion for land uses occurring in the project study area (Category B) is 67 A-weighted decibel scale (dBA) A-weighted equivalent sound level (L_{eq}). For this analysis, the noise sensitive land use in the project corridor has been divided into nine noise sensitive areas (NSAs), with a supplemental area representing portions of Patapsco Valley State Park.

Table III-14: FHWA Noise Abatement Criteria

| Activity Group | One Hour Equivalent Level ($L_{eq}(h)$, dBA) | Description |
|----------------|--|---|
| A | 57 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purposes |
| B | 67 (Exterior) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals |
| C | 72 (Exterior) | Developed lands, properties, or activities not included in Categories A or B above. |
| D | - | Undeveloped lands |
| E | 52 (Interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums |

FHWA NAC, 23 CFR, Part 772

Hourly A-Weighted Sound Level in Decibels (dBA)

Highway traffic noise analyses seek to determine if mitigation, typically in the form of vertical sound barriers, are required for the proposed project. The SHA follows FHWA protocols and guidelines to determine if the NSAs of the project warrant abatement consideration. Areas that warrant abatement consideration are then screened to determine if mitigation is feasible and reasonable, as defined by the screening criteria developed by SHA. Please refer to the technical report for a detailed discussion of warranted, feasible, and reasonable mitigation analysis.

Non-conforming land use is also present in the project area and has a significant affect on this noise analysis. The MAA has identified areas along Hanover Road that fall within the 65 dBA (DNL) Noise Contour. The DNL is the day-night average sound level (in decibels) expressed as a weighted 24-hour average. Refer to the technical report for a copy of the MAA non-

conforming land use document and the airport noise map identifying the areas of non-conforming land use. In general, residential land use is incompatible with noise levels of 65 dBA (DNL) or greater. As such, the MAA has initiated a voluntary land acquisition program for non-conforming land use in the area, provided that the properties have been zoned by local government to transition into conforming land uses (typically commercial or industrial). Anne Arundel County has adopted these zoning requirements and the MAA has initiated their land acquisition program.

2. Evaluation Methodology and Impact Analysis

Noise monitoring was used as the basis for establishing the existing worst-case noise levels. These baseline values were derived through field measurements in the project area which were then integrated into the FHWA *Traffic Noise Model v2.5* (TNM). The TNM seeks to simulate the noise environment by using a three-dimensional coordinate system to incorporate significant acoustical features. These features include roadways with variable traffic characteristics (volumes, vehicle composition, and speeds) as well as environmental features that affect traffic noise propagation (intervening terrain, tree zones, buildings, etc.). The base models incorporate the existing features as observed in the field in order to calibrate the noise model. A model is calibrated if it can predict noise levels that fall within +/- three dBA of the field-monitored noise levels. The monitored noise levels and calibration data are summarized in Table III-15. Note that monitored noise at receptor sites 1, 5, 6, 7, and 8 were dominated by non-traffic sources associated with flight operations at BWI. Consequently, traffic noise levels were lower than the ambient monitored level at those sites.

Table III-15: Monitored Noise Levels

| Receptor Site | Monitored Level | Calibration Modeling Level | Difference ^b | Existing Worst-Case Traffic Noise Levels ^a |
|-------------------------|-----------------|----------------------------|-------------------------|---|
| Receptor 1 ^a | 58.0 | 51.5 | -6.5 | 53.4 |
| Receptor 2 | 60.6 | 63.0 | 2.4 | 63.3 |
| Receptor 3 | 68.8 | 68.5 | -0.3 | 66.1 |
| Receptor 4 | 61.4 | 61.7 | 0.3 | 59.5 |
| Receptor 5 ^a | 56.7 | 40.1 | -16.6 | 39.5 |
| Receptor 6 ^a | 56.5 | 47.9 | -8.6 | 48.6 |
| Receptor 7 ^a | 56.9 | 46.6 | -10.3 | 46.5 |
| Receptor 8 ^a | 57.1 | 54.0 | -3.1 | 54.2 |
| Receptor 9 | 57.8 | 59.4 | 1.6 | 60.8 |

^a Receptor site dominated by non-traffic noise sources, primarily flight operations associated with BWI. The traffic noise component is reported in this table, as existing ambient levels can only be generally correlated to traffic noise levels.

^b Noise levels that fall outside of the +/- three dBA criteria for calibration are shown in bold.

The calibrated model is then adjusted to reflect worst-case traffic conditions to generate the worst-case existing (2004) traffic noise levels. These results are noted and the model is then re-adjusted to reflect worst-case design year (2030) noise levels. This is accomplished by incorporating future worst case traffic parameters, and is expanded through the inclusion of additional “modeled-only” sites to assist in the prediction and understanding of noise

propagation. These future No-Build noise levels assist in the evaluation of mitigation feasibility and reasonableness.

3. Results

Predicted noise levels are used to determine traffic noise impacts based on the SHA/FHWA criteria. Both the 66 dBA absolute noise level impact and substantial increase over existing noise level impact criteria were used in this assessment. The noise levels associated with this project are presented in Table III-16, and those shown in bold in the table indicate NSAs with anticipated noise impacts.

Table III-16: Predicted Design Year Noise Levels

| NSA | Receivers | Number of Residences Represented | Existing Worst Case | Future No-Build | Alternatives 3 and 3A | Alternatives 4 and 4A | Alternative 7 | Alternative 8 |
|----------------------------|-----------|----------------------------------|---------------------|-----------------|-----------------------|-----------------------|---------------|---------------|
| 1 | R-1 | 1 | 53.4 | 61.2 | 72.1 | 72.1 | 72.1 | 72.5 |
| | R-1A | 1 | 53.6 | 61.6 | 71.8 | 71.8 | 71.8 | 72.3 |
| 2 | R-2 | 1 | 63.3 | 65.2 | 59.4 | 59.4 | 59.4 | 59.4 |
| | R-2A | 1 | 61.3 | 64.8 | 64.7 | 64.7 | 64.7 | 64.7 |
| | R-2B | 3 | 57.4 | 63.3 | 63.5 | 63.5 | 63.5 | 63.5 |
| 3 | R-3 | 2 | 66.1 | 68.6 | 68.6 | 68.6 | 68.6 | 68.6 |
| 4 | R-4 | 5 | 59.5 | 62.0 | 62.1 | 62.1 | 62.1 | 62.1 |
| 5 | R-5 | 1 | 39.5 | 41.8 | 62.6 | 62.6 | 62.6 | 62.6 |
| | R-5A | 2 | 39.9 | 42.2 | 55.3 | 55.3 | 55.3 | 55.3 |
| 6 | R-6 | 2 | 48.6 | 54.9 | 63.1 | 62.6 | 58.3 | 58.1 |
| | R-6A | 4 | 50.5 | 58.5 | 60.1 | 60.1 | 59.9 | 59.9 |
| 7 | R-7 | 2 | 46.5 | 51.0 | 62.3 | 62.1 | 76.3 | 76.5 |
| | R-7A | 1 | 48.6 | 55.7 | 70.7 | 70.7 | 77.6 | 77.6 |
| 8 | R-8 | 1 | 54.2 | 56.0 | 60.3 | 60.1 | 59.8 | 59.8 |
| 9 | R-9 | 1 | 60.8 | 67.2 | 68.3 | 68.3 | 64.2 | 64.1 |
| | R-9A | 2 | 56.9 | 63.1 | 66.4 | 66.4 | 63.2 | 62.8 |
| Patapsco Valley State Park | Ref 1-100 | * | 71.3 | 73.1 | 74.1 | 74.1 | 74.1 | 74.1 |
| | Ref 1-200 | * | 66.3 | 68.1 | 68.4 | 68.4 | 68.4 | 68.4 |
| | Ref 1-400 | * | 60.8 | 62.9 | 63.0 | 63.0 | 63.0 | 63.0 |
| | Ref 2-100 | * | 71.0 | 72.8 | 73.9 | 73.9 | 73.9 | 73.9 |
| | Ref 2-200 | * | 65.7 | 67.5 | 69.6 | 69.6 | 69.6 | 69.6 |
| | Ref 2-400 | * | 59.8 | 61.7 | 63.2 | 63.2 | 63.2 | 63.2 |

Results in bold indicate anticipated noise impacts. * Patapsco Valley State Park represents a special land use and is not associated with a quantity of residences.

Note that in several areas (NSAs 1, 5, 6, 7, and 8), traffic noise did not dominate the ambient acoustical environment. NSA 1 does not contain roadways with enough traffic to dominate the ambient noise levels. NSAs 5 through 8 are dominated by non-traffic noise sources, specifically

a departing flight path associated with BWI. In these areas, TNM is not able to accurately represent ambient acoustical noise levels due to a lack of significant local noise contributing roadways. The traffic noise component of the overall ambient noise levels was reported for those NSAs. As stated earlier, a detailed airport noise analysis is not required, as the proposed project would not affect airport operations. Non-conforming land use is also present in the project area, and these areas have been exempted from mitigation consideration due to their transition away from noise sensitive land use.

a) Alternatives 3, 3A, 4, and 4A

Five of the nine NSAs, as well as portions of Patapsco Valley State Park would experience build year noise levels equal to or exceeding FHWA/SHA impact criteria for Alternatives 3, 3A, 4, and 4A, and therefore warrant abatement consideration. Feasible mitigation was investigated for NSAs 1, 3, 5, 7, and 9.

Local access constraints preclude mitigation consideration for NSAs 1 and 9. Mitigation in the form of a vertical noise barrier generally requires that an unbroken barrier be constructed adjacent to the noise sensitive parcels for a length extending four times the distance between the “edge” impacted sites and the source. In developing potential mitigation along the MD 295 southbound exit ramp as well as along the MD 295 mainline, Hanover Road was found to be the dominant traffic noise source for both of these NSAs. No benefits in NSA 1 and benefits of less than 1 dBA in NSA 9 would be realized for barriers at these locations. Local driveway access would preclude construction of an unbroken barrier along Hanover Road in these NSAs.

Mitigation for NSA 3 was found to be feasible but not reasonable. The SHA policy on result from the build condition, a sound barrier could be considered not to be reasonable. Design changes are minimal in this section of the project area, yielding No-Build noise levels that are identical to those predicted for the build condition. Design changes do not have an audible effect on this NSA. Consequently, noise mitigation is not reasonable. It should also be noted that this NSA includes only two residences, severely limiting mitigation design that would reasonably cost less than \$50,000 per benefited residence.

NSAs 5 and 7 contain non-conforming residential land use and are therefore exempt from mitigation consideration.

b) Alternatives 7 and 8

Four of the nine NSAs as well as portions of Patapsco Valley State Park would experience build year noise levels equal to or exceeding FHWA/SHA impact criteria for Alternatives 7 and 8 and therefore warrant abatement consideration. Feasible mitigation was investigated for NSAs 1, 3, 5, and 7. The mitigation for these areas was discussed in association with Alternatives 3, 3A, 4, and 4A in the preceding section.

4. Mitigation Summary

Because the No-Build Alternative would not involve additional highway improvements or increase existing capacity, noise abatement was not considered. Future No-Build noise levels were used to determine reasonability.

Patapsco Valley State Park is a unique land use in the project area that was given independent consideration of mitigation. The portion of the park within and directly surrounding the project area are typified by open space with no active use component. Because there is no active use of the park in this location, noise abatement was not considered. The Noise Technical Report includes additional details on this special land use.

H. Hazardous Materials

A substantial amount of risk can be imposed upon humans if municipal, industrial, and residual wastes are not stored, disposed and cared for appropriately. To identify and account for the municipal, industrial, and residual waste materials within the study area, an Initial Site Assessment was conducted for the study area. The following narrative is a summary of this assessment. For details, please refer to the *Initial Site Assessment for the MD 295 Planning Project* (SHA 2006b).

Of the 45 sites within and surrounding the study area that were identified as having potential hazardous waste concerns, a total of 30 are recommended for further investigation. The Initial Site Assessment (Maryland State Highway Administration 2006b) identified 29 of these, and the final site was identified following preparation of that assessment. Twenty-five of the potential sites of concern contain under- or aboveground storage tanks (UST/AST) – two of which are Resource Conservation and Recovery Act (RCRA) hazardous waste generators with documented violations. Two of the remaining sites are dump sites and one is a dry cleaners. MD 295 itself was recommended for soil sampling along the roadway to detect any surface soil contamination. The final site was discovered during the natural resources field investigations. It is a fenced area with a locked gate that was not evaluated for potential hazardous material during the Initial Site Assessment due to this restricted access. No National Priority List (NPL) sites, state hazardous waste sites, or Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) sites were identified within the project study area.

1. Impacts and Minimization/Mitigation

There are 30 sites with potential for hazardous materials that could be affected by the build alternatives. Depending on the area required for acquisition, further investigations of some or all of these sites could be required and would be conducted prior to acquisition. Further investigations could include soil sampling and testing to determine whether hazardous materials remain on the site. Should contaminated soil be present within the site, excavation and proper removal/disposal of the material would be required.

I. Indirect and Cumulative Effects (ICE) Analysis

1. ICE Analysis Objective and Scoping

An ICE Analysis was conducted in compliance with the NEPA, Council on Environmental Quality regulations (40 CFR 1508.25(c)), and SHA guidelines (SHA 2007e). The ICE Analysis is required to investigate all past, present and reasonably foreseeable future actions. Secondary impacts are those reasonably foreseeable impacts occurring after the construction of the project, due to development that is dependent upon the project's alternatives. Cumulative effects are those incremental impacts on the environment which result from the action when added to other

past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertake such actions. ICE scoping involved identifying environmental resources in the project area and ICE issues for consideration, such as data availability, geographic boundaries and time frames for analysis.

a) Resources

Resources impacted directly and/or secondarily by the project form the basis for resources examined by the ICE Analysis. Table III-17 shows the resources that were analyzed and the rationale for their inclusion. Representative sub-boundaries for these resources are also listed in the table. These sub-boundaries were used to form the overall ICE Boundary (Figure III.8).

Table III-17: Summary of Potential ICE Resources

| Resource | Incorporation into ICE Analysis | Rationale | Representative Sub-boundary |
|---|---------------------------------|----------------|-------------------------------|
| <i>Socioeconomic Resources</i> | | | |
| Community Resources (cohesion, linkages, services, labor) | Yes | Direct Impacts | Census Tracts, Planning Areas |
| Park and Recreation Facilities | Yes | Direct Impacts | Watersheds, Planning Areas |
| Farmland/Agriculture | Yes | Direct Impacts | Watersheds, Planning Areas |
| <i>Natural Environmental Resources</i> | | | |
| Floodplains | Yes | Direct Impacts | Watersheds |
| Groundwater | Yes | Direct Impacts | Watersheds |
| Surface Water | Yes | Direct Impacts | Watersheds |
| Wetlands | Yes | Direct Impacts | Watersheds |
| Streams | Yes | Direct Impacts | Watersheds |
| Terrestrial Habitat (woodland) | Yes | Direct Impacts | Watersheds |
| Rare, Threatened, Endangered Species | Yes | Direct impacts | Watersheds |

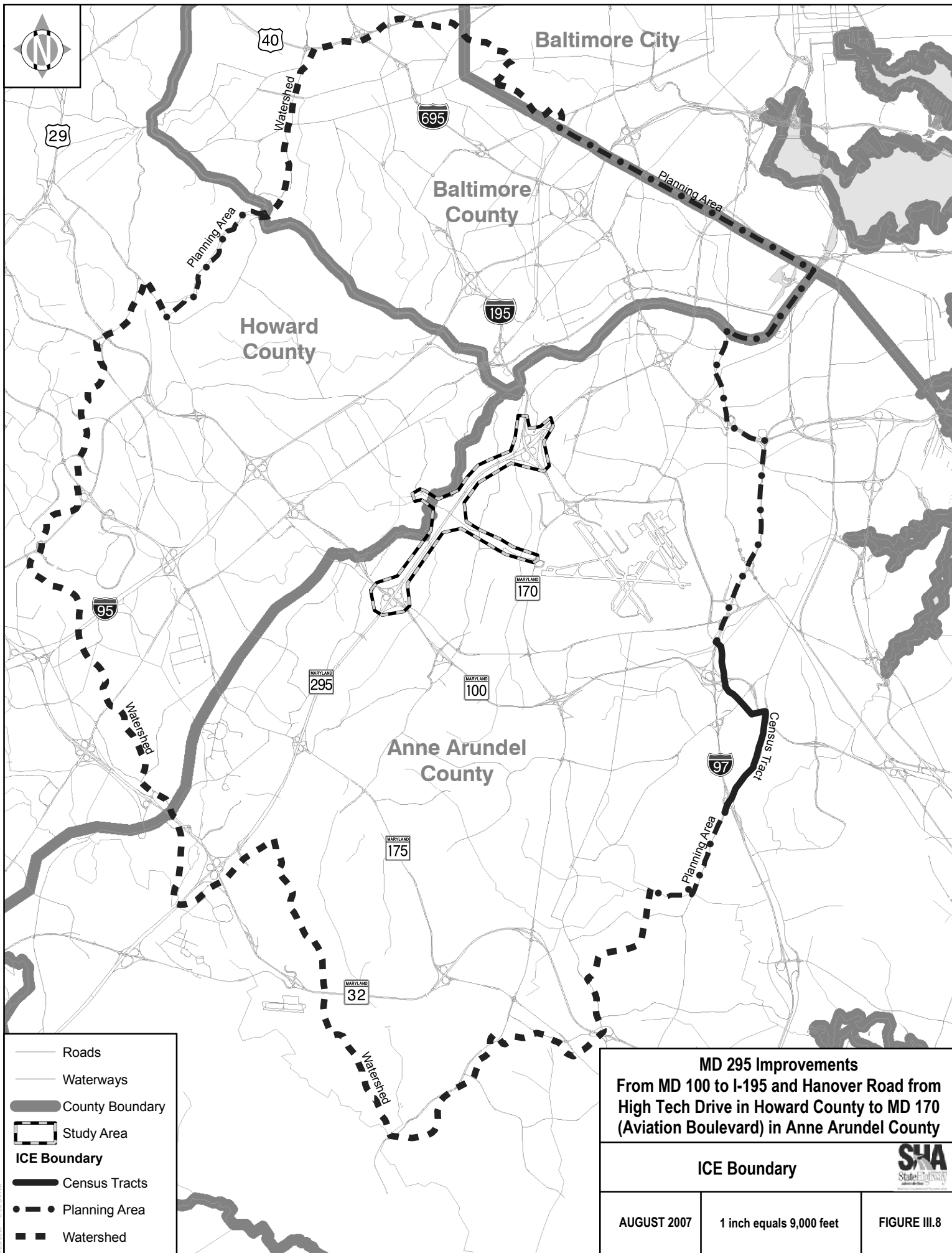
b) Time Frame

A period of 60 years, from 1970 to 2030, was selected to represent the ICE time frame. This time frame was chosen after reviewing historical events that took place within the study area, changes in population growth, availability of data, and the design year of the project.

Table III-18 shows the change in population for Anne Arundel, Howard, and Baltimore Counties, from 1930 to 2000. As the table indicates, populations increased significantly in the 1950s and more than doubled the 1950s total by the 1970s in Anne Arundel, Howard, and Baltimore Counties.

Table III-18: Population within Anne Arundel, Howard, and Balt. Counties, 1930-2000

| County | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Anne Arundel | 55,167 | 68,375 | 117,392 | 206,634 | 297,539 | 370,775 | 427,239 | 489,656 |
| Howard | 16,169 | 17,175 | 23,119 | 36,152 | 61,911 | 118,572 | 187,328 | 247,842 |
| Baltimore | 124,565 | 155,825 | 270,273 | 492,428 | 621,077 | 655,615 | 692,134 | 754,292 |



Choosing the ICE past time frame of 1970 was not only based on the population growth (population more than doubled by 1970), but also on other significant land use changes and development within the area by the 1970s. In the early 1950s, two large transportation projects were initiated that most likely affected the study area. In 1950, the Friendship International Airport was completed and opened for service. At approximately the same time, MD 295 was completed. In 1972, the airport was purchased by the MDOT from the City of Baltimore, and airport operations grew from three employees to more than 200. The name was also changed to Baltimore/Washington International Airport to reflect the regional importance of this growing airport. Airport expansion and renovation occurred throughout the 1970s, 1980s, and 1990s, and continues to this day. The name of the airport changed again in October 2005 to Baltimore/Washington International Thurgood Marshall Airport in honor of the late Thurgood Marshall.

Other important transportation projects that affected land use changes in the study area include the Harbor Tunnel, I-695, the corresponding section of I-95, the Francis Scott Key Bridge, and the Fort McHenry Tunnel. The Harbor Tunnel was completed in 1957, and at approximately the same time the construction for I-695 was initiated and incorporated into the interstate system. The original section of I-695 was completed in 1962, and it ran clockwise from Ritchie Highway (MD 2) to Pulaski Highway (US 40), from current exits 3 to 35. In 1971, the corresponding section of I-95 was completed. In 1977, the Francis Scott Key Bridge over the Patapsco River (Baltimore Harbor) was opened, which included an 11-mile toll facility from MD 10 to MD 151. The Fort McHenry Tunnel was completed in 1985.

The future time frame was determined from the project's design year of 2030. Most population and travel forecasting projections are available through 2030, although some data is only available to year 2020.

c) Geographic Boundary

The geographic boundary for evaluating potential secondary and cumulative effects was established based on a review of resources directly affected by the project. Potential sub-boundaries included census tracts, planning areas, watersheds, the project Area of Traffic Influence (ATI), Traffic Analysis Zones (TAZs) and PFAs. Three of these resource boundaries – census tracts, planning areas, and watershed boundaries – were used as representative sub-boundaries. The sub-boundaries considered in establishing the geographic boundary of the ICE Analysis area are described below.

Election Districts and Census Tracts

Twelve census tracts lie partially within the study area in Anne Arundel, Baltimore, and Howard Counties. The census tracts within the study area were not delineated by the U.S. Department of Commerce until 1970. Therefore, population trends and analysis prior to 1970 used election districts (also known as “minor civil divisions” or “county subdivisions”). Election districts are also useful for trend analyses because their boundaries have not changed since prior to 1910. The election districts that are within the study area include: Election Districts 4 and 5 (Anne Arundel County); Election Districts 1 and 6 (Howard County); and Election Districts 1 and 13 (Baltimore County). Election district boundaries were not specifically used as an ICE sub-boundary; however, they were used to evaluate population trends. Census tract boundaries were

used as the southeastern sub-boundary of the overall ICE Analysis boundary to represent socioeconomic resources affected by the project.

Planning Areas

There are 16 small planning areas managed by the Anne Arundel County Department of Planning and five planning areas managed by the Howard County Department of Planning. Baltimore County has 42 regional planning districts. The regional planning districts of Baltimore County were classified as planning areas for purposes of ICE. Planning areas were used to represent impacts to socioeconomic and cultural resources. The ICE Analysis Boundary falls within Elkridge and part of Columbia and Southeast planning areas of Howard County; Severn, Linthicum/BWI, Odenton, Brooklyn Park, and part of Glen Burnie planning areas of Anne Arundel County; and Arbutus/Lansdowne and part of Catonsville planning area of Baltimore County. The planning area boundary was used for the northeast, northwest, and a portion of the southeast portion of the overall ICE Analysis boundary.

Watersheds

The MD DNR 12-digit watershed boundaries were used to assess impacts to natural resources such as forested lands, streams, wetlands, and floodplains. There are approximately 12 sub-watersheds located in the ICE Analysis boundary; Piny Run, Deep Run, unnamed tributaries to Deep Run, Stony Run, Dorsey Run, Severn Run, Midway Branch/Franklin Branch/Rogue Harbor Branch (note: all three names were stated for the same sub-watershed 12-digit number in the MD DNR Waterkeepers data), Picture Spring Branch, Saw Mill Creek, Marley Creek, Soapstone Branch (called Rockburn Branch in Howard County) and the Patapsco River. Stony Run is located in the eastern side of the study area and Deep Run is located along the western side of the study area. The watershed boundary was used to create all or part of the southern, western, and northern portions of the overall ICE Analysis boundary.

Traffic Analysis Zones and Area of Traffic Influence

The Metropolitan Washington Area Council of Governments has developed TAZs for the Washington Metropolitan Area. A TAZ is a special area used for tabulating traffic-related data, especially journey-to-work and place-of-work statistics. The TAZ boundaries were used to create the ATI, which included 20 TAZs. The ICE Analysis boundary includes 96 TAZs in Anne Arundel, Baltimore, and Howard Counties, although the TAZs were not used as ICE sub-boundaries.

Priority Funding Areas

The study area is located almost entirely within the PFAs that surround the Anne Arundel County BWI/Linthicum Small Area Plan and Howard County Master Plan. PFAs are existing communities and other local areas designated by local jurisdictions in accordance with Maryland “Smart Growth” guidelines. The intent of the Smart Growth guidelines, as established by the Neighborhood Conservation Act of 1997, is to limit sprawl by directing state funding for growth-related projects. Since the study area is entirely within the PFA, it was not used as an ICE sub-boundary.

d) Land Use Summary

In order to evaluate the potential effects of the proposed transportation alternatives, it is useful to identify the pattern, intensity, and pace of development in the area. Past, present, and future land

use within the ICE Analysis boundary were evaluated. Past land use of the ICE area provided a baseline to compare with current land use. This comparison allowed for the observation of trends that, in conjunction with local comprehensive plans and anticipated development, assisted in predicting future land use and potential cumulative effects of the project. Land use within the ICE Analysis boundary (Table III-19) is shown for 1973 and 2002.

Table III-19: ICE Analysis Study Area Land Use/Land Cover, 1973 – 2002.

| Land Use | 1973 (Acres) | 1973 % of Total Land | 2002 (Acres) | 2002 % of Total Land | Change (acres) 1973-2002 | % Change 1973-2002 |
|---------------------------------|------------------|----------------------------|------------------|----------------------------|--------------------------------|-----------------------|
| Low Density Residential* | 4,325.73 | 6.36 | 5,920.00 | 8.7 | 1,594.27 | 2.33 |
| Medium/High Density Residential | 10,191.65 | 14.98 | 15,406.65 | 22.6 | 5,215.00 | 7.64 |
| Commercial/Industrial | 5,156.53 | 7.58 | 10,850.28 | 15.9 | 5,693.75 | 8.35 |
| Institutional/Open Urban | 2,774.55 | 4.08 | 4,078.82 | 6.0 | 1,304.27 | 1.91 |
| Other Land** | 1,767.82 | 2.60 | 2,681.86 | 3.9 | 914.04 | 1.34 |
| Total Development | 24,216.28 | 35.60 | 38,937.60 | 57.2 | 14,721.33 | 21.57 |
| Agriculture | 9,043.08 | 13.29 | 3,627.08 | 5.3 | -5,416.00 | -7.97 |
| Forest | 33,755.29 | 49.60 | 24,573.66 | 36.1 | -9,181.63 | -13.52 |
| Extractive/Barren | 536.38 | 0.79 | 321.95 | 0.5 | -214.43 | -0.32 |
| Wetland | 365.99 | 0.54 | 425.34 | 0.6 | 59.35 | 0.08 |
| Total Resources | 43,700.74 | 64.22 | 28,948.03 | 42.5 | -14,752.70 | -21.73 |
| Total Land | 67,917.02 | 99.82 | 67,885.64 | 99.7 | -31.38 | -0.16 |
| Water | 131.70 | 0.19 | 229.10 | 0.3 | 97.40 | 0.15 |
| Total | 68,048.72 | 100.00 | 68,114.74 | 100.0 | 66.02 | -0.01 |

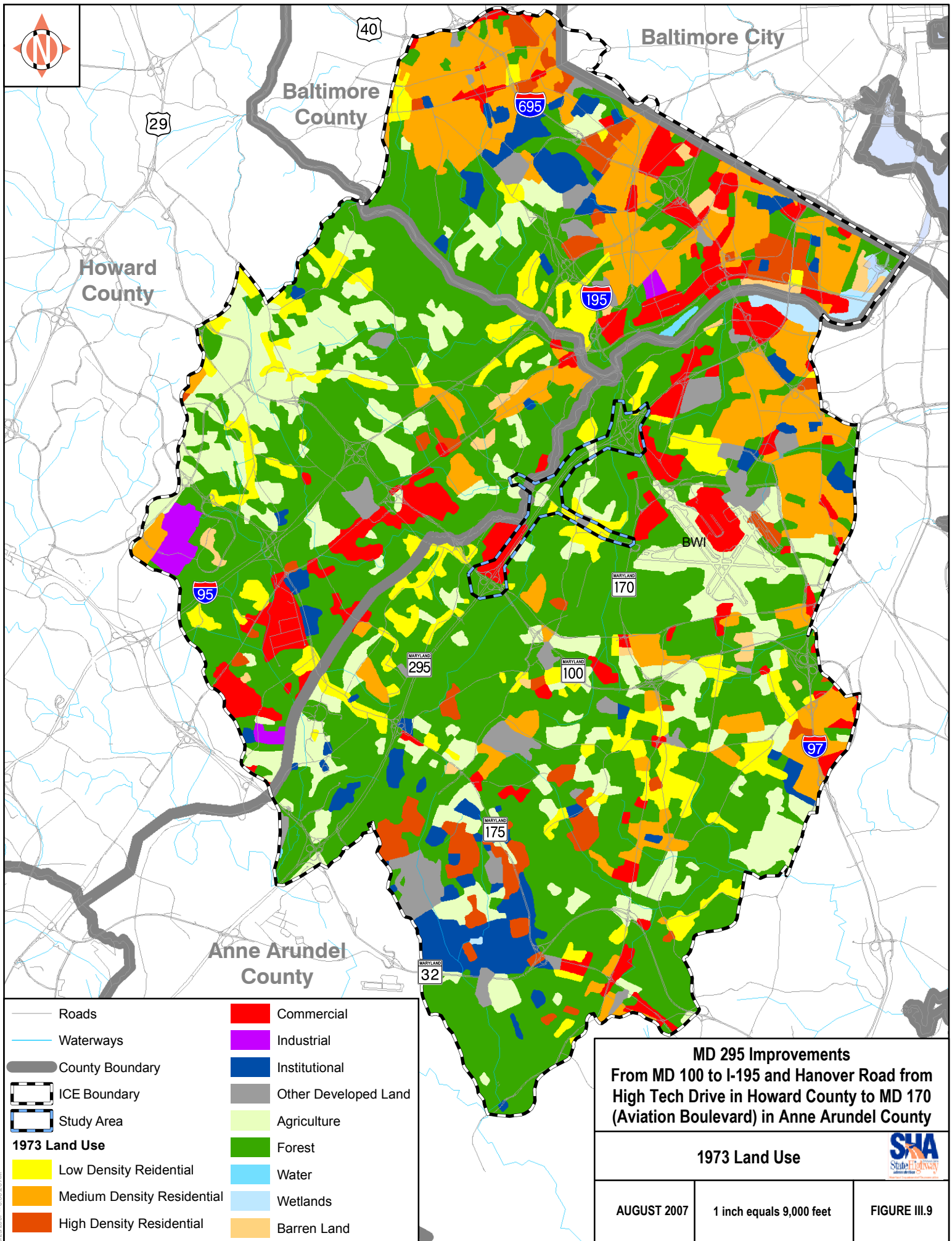
Source: Maryland Department of Planning (MDP) (1990, 2002)

* The difference in low density residential is caused by different classification rules used for the 1973 and 2002 data sets.

** Other Land is comprised of Extractive/Barren and Transportation Land Use Categories

Past Land Use

Land use within the ICE Analysis boundary in 1973 was dominated by forest land (49.6 percent) (Figure III.9 and Table III.19). In 1973, 13.3 percent of total lands were agricultural, with agricultural land located throughout the ICE area, although the largest tracts were located in the northwest portions of Howard County. Over 35.6 percent of past land use (1973) was made up of mixed use development. This mixed development included residences and commercial and industrial lands. Residential properties were concentrated in Baltimore County and along the eastern edge of Anne Arundel County and encompassed approximately 28.9 percent of the total



land use. Commercial and industrial properties were scattered throughout the ICE area, with the highest concentrations in Howard and Baltimore Counties. Commercial and industrial properties cover approximately 7.6 percent of total land.

Present Land Use

The present land use conditions (MDP 2002) in the ICE Analysis boundary are depicted on Figure III.10 and summarized in Table III-19. Over 57 percent land use in 2002 is mixed use development, as opposed to the 35.6 percent in 1973. In 2002, 36.1 percent of the ICE area is still forested, although between 1973 and 2002 there was a loss of 13.5 percent of the forested areas. According to the available GIS information from 2002, large residential tracts of land are located throughout the ICE area in all three counties, specifically in the northeastern and southeastern sections of Anne Arundel County, the northwestern section of Howard County, and throughout the portion of Baltimore County that lies within the ICE Analysis boundary. Other smaller commercial/industrial tracts can be found throughout the study area, primarily in the western portion of Howard County and in the study area as well as the northeast portion of Baltimore County.

In addition, growth within the BWI/Linthicum planning area is controlled by local zoning ordinances as well as by the BWI Airport Noise Zone (ANZ), which is an area that has been established by MAA to address development in areas that are exposed to high noise levels. MAA acquires residential properties within the ANZ through a voluntary land acquisition program and the properties are rezoned to compatible land uses such as commercial and industrial. As a result of this program the MD 295 project area has been rezoned to commercial/industrial.

Future Land Use

Future land use within the ICE Analysis boundary will be primarily influenced by the recommendations of existing land use plans and zoning. Future development within the MD 295 study area was based on Anne Arundel County Small Area Plans, *Maryland's Changing Land, Past Present and Future* (2001), Baltimore County's Master Plan 2020, and the Anne Arundel and Howard County Capital Budget FY 2007. Figures III.11 through III.12 depict all the proposed commercial and residential development in the ICE Analysis boundary, and the largest projects (over 100 acres) in the ICE Analysis boundary are listed in Table III-20 and depicted on Figure III.13. The large projects are primarily residential and mixed use in Anne Arundel County and Howard County. There are no projects over 100 acres proposed in Baltimore County within the ICE area. In addition to the large projects listed in Table III-20, the proposed release of MAA-owned property (URS Corporation 2007) represents another change in future land use within the ICE Analysis boundary.

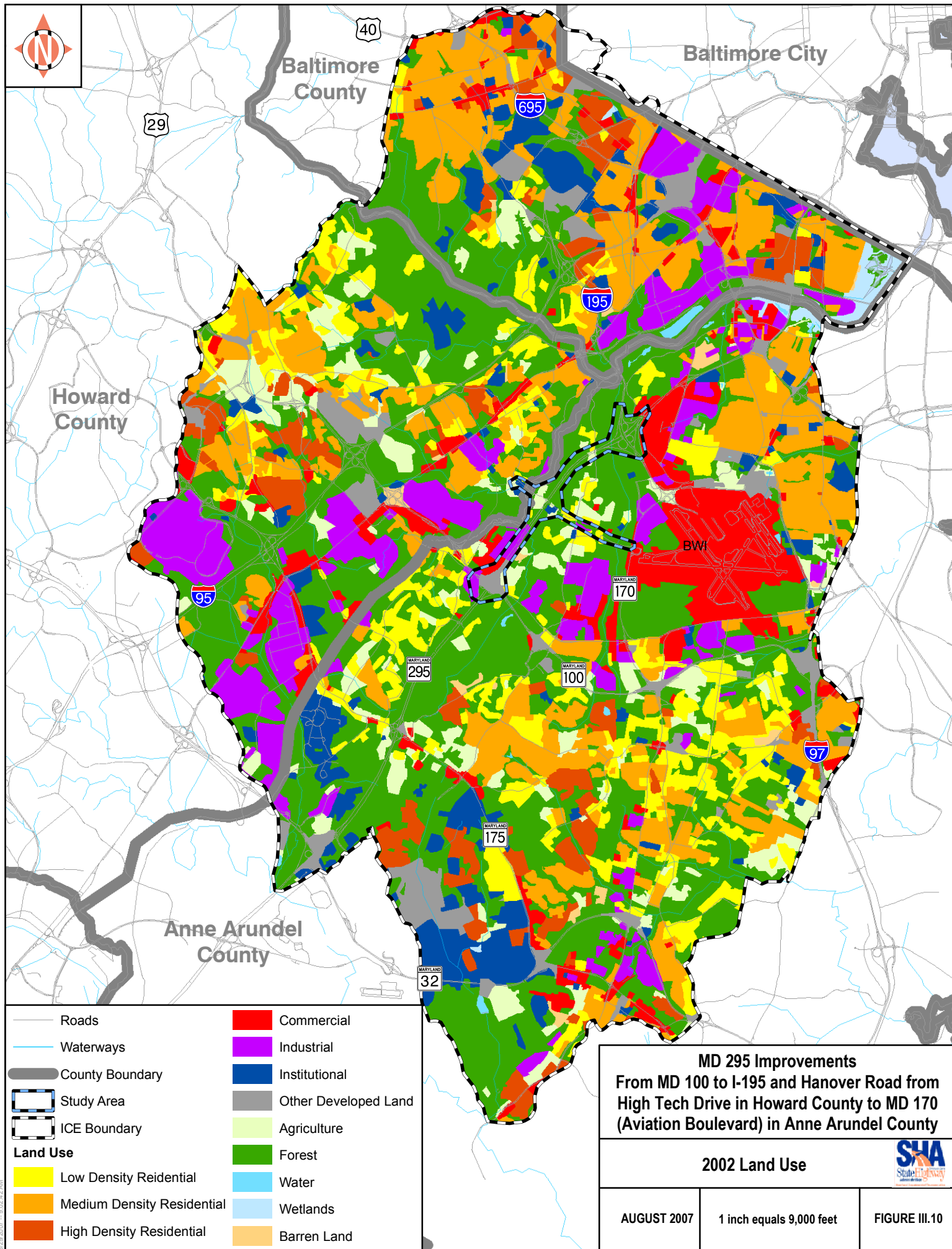


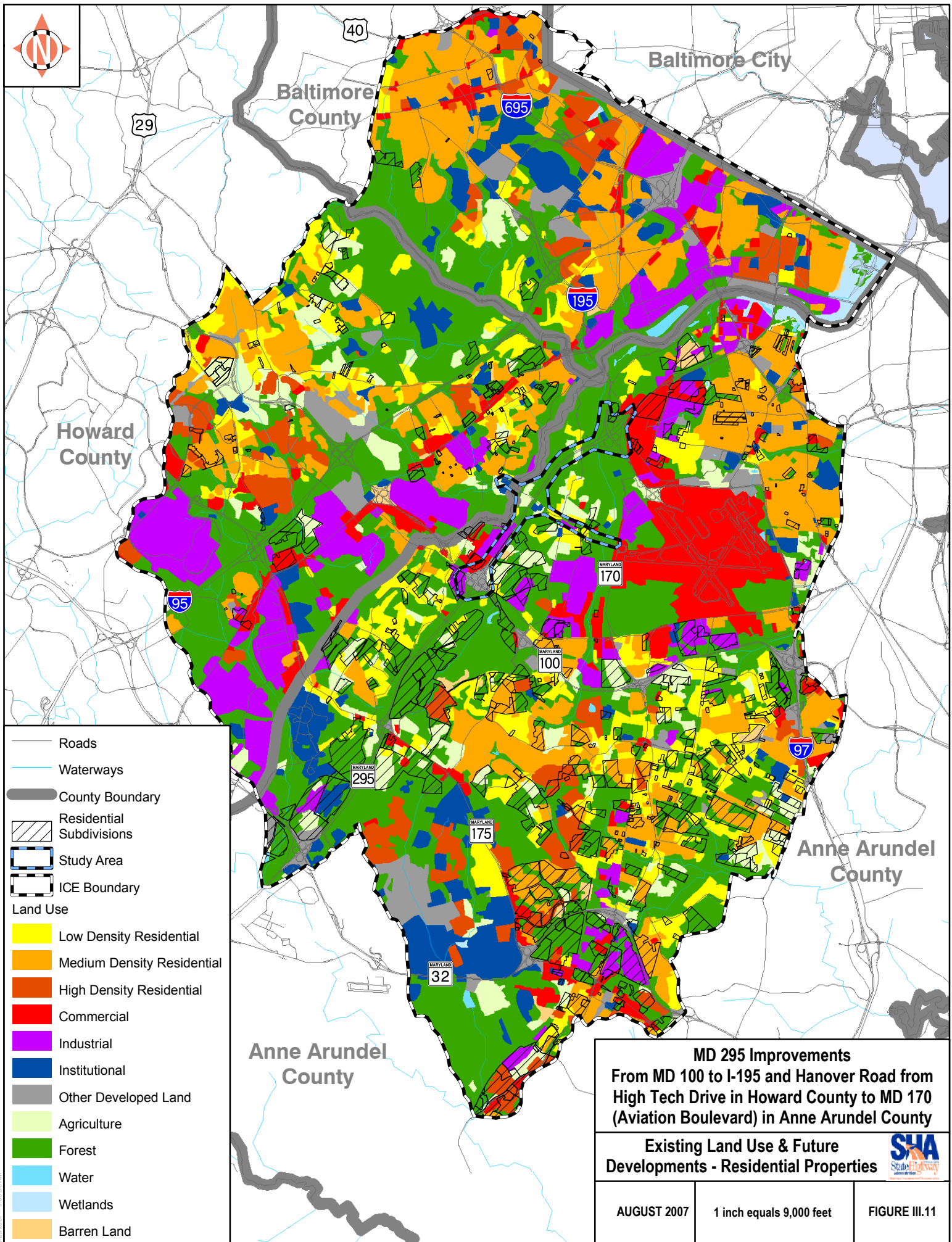
Table III-20: Largest Anticipated Developments Within or Near the ICE Study Area.

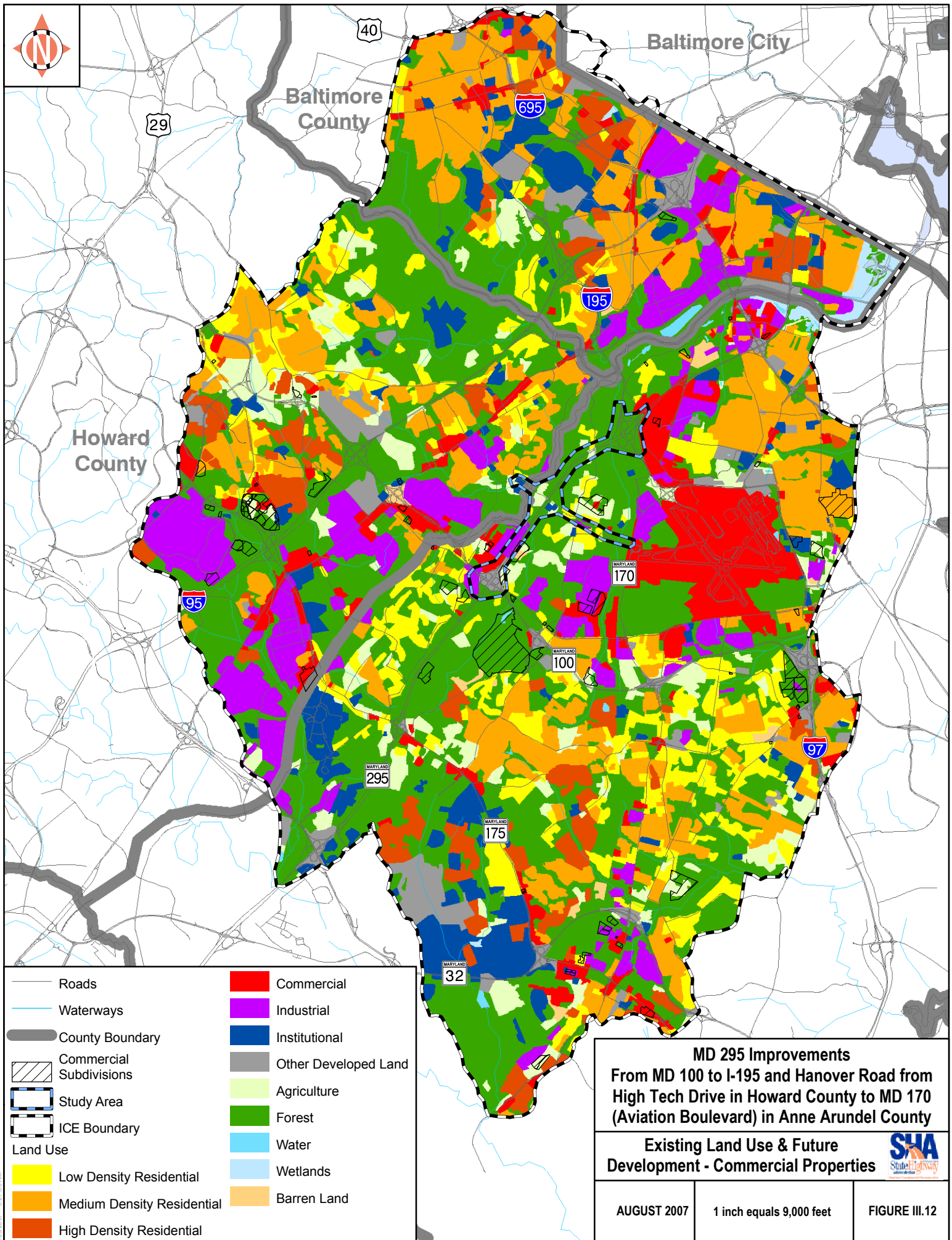
| Map ID* | Development Name | Type of Development | Acres | County | Status | Potential Resources Impacted |
|---------|---|---------------------|-------|--------------|----------------------------|----------------------------------|
| 1 | Hock Business Park | Mixed Use | 103 | Anne Arundel | Final Phase | Agriculture, forest, water |
| 2 | Miklasz Property | Residential | 105 | Anne Arundel | Approved/To be constructed | Agriculture, forest |
| 3 | Piney Orchard/Cedar Ridge Condos | Mixed Use | 112 | Anne Arundel | Final Phase | Agriculture, forest |
| 4 | Annapolis Junction Business PK/Centralia Mult | Residential | 115 | Anne Arundel | Approved/To be constructed | Agriculture, forest, water |
| 5 | Odenton Town Center (Halle Property) | Mixed Use | 119 | Anne Arundel | Signed | Forest |
| 6 | Arundel Crossing East Lot 18 | Residential | 119 | Anne Arundel | Final Phase | Forest |
| 7 | National Business Park, Lts 21R-32RR | Mixed Use | 121 | Anne Arundel | Preformal Phase | Agriculture, forest |
| 8 | Benson East | Mixed Use | 122 | Howard | Final Plan | Agriculture, forest |
| 9 | Kies Property LTS 1rr,3,rr,4r5,6 | Industrial | 128 | Anne Arundel | Final Phase | Agriculture, forest, barren land |
| 10 | Quarterfield Farms | Residential | 132 | Anne Arundel | Signed | Forest |
| 11 | Meadowridge Business Center | Industrial | 149 | Howard | Final Plan | Forest |
| 12 | Clarks 100 | Residential | 179 | Anne Arundel | Preformal Phase | Agriculture, forest |
| 13 | National Business Pk, Lts 16rr and 17rrr | Mixed Use | 180 | Anne Arundel | Final Phase | Agriculture, forest |
| 14 | Arundel Preserve Ph1 Par 1 Resub/Retail | Mixed Use | 197 | Anne Arundel | Approved/To be constructed | Forest, barren land |
| 15 | Parkside | Mixed Use | 248 | Anne Arundel | Final Phase | Agriculture, forest |
| 16 | Chase Quarry | Mixed Use | 276 | Howard | Final Plan | Forest |
| 17 | Arundel Mills Blk A Lot 1R Best Buy | Mixed Use | 303 | Anne Arundel | Final Phase | Forest, water, barren land |
| 18 | Seven Oaks | Mixed Use | 385 | Anne Arundel | Signed | Forest, barren land |

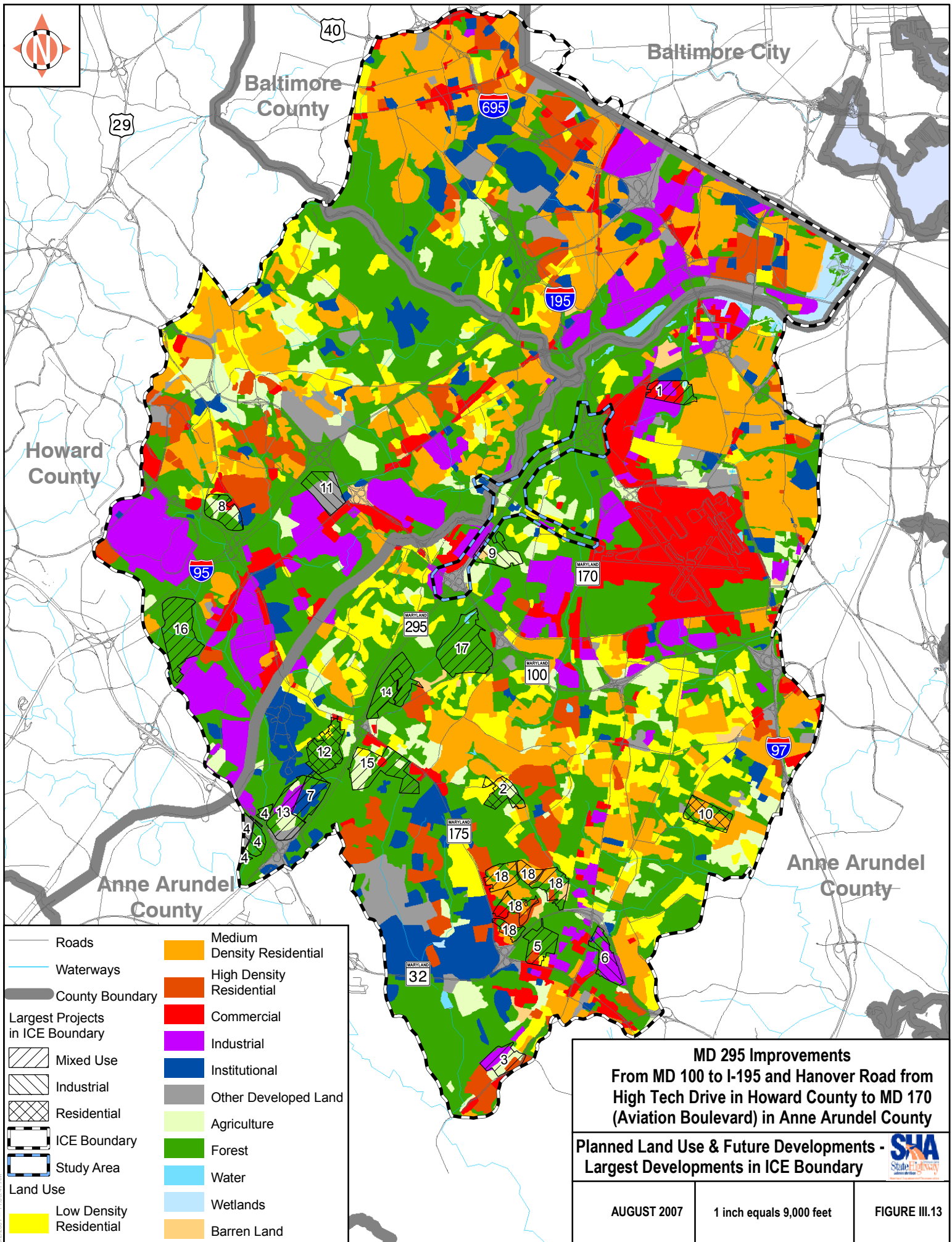
Sources: MDP and Anne Arundel, Howard, and Baltimore County Planning Departments.

2. Analysis

There are no proposed residential, commercial/industrial, or transportation projects that are dependent on completion of the MD 295 project. The project would have no secondary effects because the project area is already accessible by existing roads, and all of the future projects would occur regardless of the MD 295 project. Consequently, the analysis that follows considers only potential cumulative impacts on resources in the ICE Analysis boundary. However, the construction of a new interchange at Hanover Road may make the project area more attractive to new development, particularly commercial uses. This may have an indirect effect of generating additional commercial interest in the Hanover Road area, although such projects have not been proposed to date. Additional projects could potentially increase cumulative impacts on environmental resources. Nevertheless, these indirect effects would be compatible with current plans and zoning, and would also be constrained by the ANZ program (see page III-56). The projects proposed to date are scattered throughout the ICE Analysis area and are compatible with the county's planning documents and zoning, and are not concentrated in or near the project area, as illustrated in Figures III.10 through III.12.







a) Socio-economic Impacts

Community Resources

The ICE Analysis boundary includes many small residential neighborhoods, industrial parks, and natural areas in addition to BWI. Specifically, the area in Anne Arundel County includes a portion of the Patapsco Valley State Park, one residential subdivision (Shirley Heights), and several business and technology parks. In the southwestern section of the ICE area are industrial parks and business centers located directly adjacent to MD 295 at the Route 100 interchange. Portions of Patapsco Valley State Park as well as open space/forested land and undeveloped land is located in this section adjacent to Hanover Road. Within Anne Arundel County in the south-central section of the ICE area are residences and business parks. The majority of the residences are located along New Ridge Road and south of Dorsey Road. In addition, the Hanover area southwest of the airport has been rezoned to commercial/industrial within the BWI/Linthicum planning area. Arundel Mills Mall is on the outskirts of Harmans, south of Route 100. Within the northwestern section of the ICE area in Howard County, are residential areas and industrial parks and business centers, including the industrial park in the northeastern quadrant of the Route 1 and Route 100 interchange.

Past impacts to community resources within the ICE Analysis boundary are probably typical of many formerly rural areas that have undergone significant development, land conversion, and population growth, often as a consequence of their proximity to urban center(s). As population size and density grow, roads become more crowded, the visual characteristics of neighborhoods and open areas change, and boundaries between small communities begin to overlap, sometimes leading to a loss of character and “small town feel.” Additionally, local and regional economies change, and the demand and requirements for community resources (i.e. recreation areas, schools, religious facilities, health care, emergency services, retail business services) gradually increases.

Cumulative effects to community resources would be both beneficial and adverse. All cumulative effects associated with the MD 295 project would be the same, regardless of the build alternative selected. Three to four residential displacements are expected with each of the build alternatives. This may cause minor visual impacts around the MD 295 project area, as certain visual elements are removed, and replaced with roadway features. The only impacts to business areas would result from ROW requirements. In addition, there would be increased traffic for all residents along Hanover Road. The addition of sidewalks and a bike lane would help mitigate the impacts to the community.

The build alternatives would not affect the community as a result of the proposed residential displacements because no established communities would be bisected by the roadway improvements. In addition, growth within the BWI/Linthicum planning area is controlled by local zoning ordinances as well as by the BWI ANZ, which is an area that has been established by the MAA to address development in areas that are exposed to high noise levels. MAA acquires residential properties within the ANZ through a voluntary land acquisition program (Voluntary Noise Acquisition program) and the properties are rezoned to compatible land uses such as commercial and industrial. As a result of this program the MD 295 project area has been rezoned to commercial/industrial. Consequently, impacts to the residential area would be minor

since a majority of the residents have already relocated as part of the Voluntary Noise Acquisition program.

The benefits of providing transportation improvements (both safety and congestion relief), in general are that they benefit a large area compared to the potential negative impacts to a small area that may occur from these projects. The additional residences and businesses that are proposed within the ICE area will increase the population. This results in increased traffic and congestion. The MD 295 project and other transportation projects in the area would improve local traffic conditions. In addition, adding sidewalks and a bike lane to Hanover Road would benefit local communities. Overall, the cumulative effects from the project would not have a negative impact on the network of community linkages in the MD 295 project area.

Parks and Recreation

The potential impacts of the MD 295 project on the Patapsco Valley State Park and the BWI Trail, and associated Section 4(f) coordination with the MD DNR and Anne Arundel County, respectively, are described in Section III.A.6.e (pages III-14 through III-17). The potential for additional cumulative effects to parks and recreational facilities within the ICE Analysis boundary arises from the MD 295 project effects together with additional, unrelated development in the ICE area. In particular, the proposed BWI expansion may cause direct impacts to the BWI trail system. As redevelopment pressure rises, there may be additional cumulative impacts to parks and recreational areas. However, local zoning regulations are also in place to protect parks and designated conservation areas from development through the permitting process. Although cumulative impacts to parks may occur within the ICE Analysis boundary, these impacts are expected to be minimal based on protective regulations, including Section 4(f) of the 1966 Department of Transportation Act which is in place to protect publicly owned parks and recreational resources, minimize impacts and/or mitigate for any unavoidable impacts for federally funded transportation projects.

b) Natural Resources Impacts

Water Resources

Groundwater Resources

One public water supply well, used exclusively by the Fleck Machine Company, Inc., is located on Ridge Road within the ICE area. It is assumed that other commercial developments and residential homes within the study area use municipal water supplies, originating outside of the study area.

Each of the build alternatives would encroach on 7.9 acres of the wellhead protection area surrounding the well. Although this impact would occur within the SCEA boundary, there would be minimal potential for cumulative impacts to other groundwater resources within the ICE Analysis boundary as a result of any of the build alternatives. The increase in impervious surface would proportionately increase runoff carrying vehicle-generated pollutants (e.g., oil, coolants, brake fluids, and rubber), which could potentially enter groundwater resources. The contaminated groundwater has the potential to affect the streams that feed the Chesapeake Bay where both groundwater and surface waters eventually drain. Stormwater runoff would be managed under current Maryland Stormwater Management Guidelines (MDE 2001), and the project would be designed in accordance with MDE stormwater regulations and BMPs. Any

impacts to groundwater resources would be closely monitored by MDE and would fall under the regulation of the Safe Drinking Water Act.

Wetlands, Aquatic Habitats, and 100-Year Floodplains

Cumulative impacts to wetlands, aquatic habitat, and the 100-year floodplain caused by development within the ICE Analysis boundary would include direct impacts to wetlands, the 100-year floodplain, and streams in the project limits (Stony Run, Deep Run, and Piny Run) by all of the build alternatives, and indirect long-term effects associated with increased road surfaces and impervious area. Stony Run, Deep Run, and Piny Run are all located within the Patapsco River Lower North Branch watershed.

The potential for additional indirect, cumulative effects to wetlands, aquatic habitat, and the 100-year floodplain arises from the MD 295 project together with additional, unrelated development within the ICE study area. In particular, the proposed BWI expansion and anticipated growth of the BWI business district may cause direct impacts to area wetlands and waterways. As redevelopment pressure rises, there may be additional cumulative impacts to wetlands and waterways. These would arise from continued resource land conversion to developed land, corresponding increases in impervious surfaces, and increased source and non-source pollutant loads. There are already significant amounts of developed land in the project area that have contributed to a degraded water quality.

Although cumulative impacts to wetlands, aquatic habitat, and water quality may occur within the ICE Analysis boundary, these impacts are expected to be minimal based on protective regulations related to wetland and waterways, forest conservation, and stormwater, sediment, and erosion control. Strict zoning and state and federal regulations are in place to protect wetlands, waterways, and designated conservation areas from development through the permitting process. Additionally, limiting cumulative impacts to natural resources will require protection of critical resource lands, directing new development to existing developed lands, enhancing control of stormwater quantity and quality, and maximizing the use of smart growth and low impact development approaches.

Woodlands

Woodlands, or forest cover, comprised approximately 36.1 percent of the total land cover within the ICE Analysis boundary in 2002, making it the fourth most abundant land cover after medium/high density residential, institutional/open urban, and commercial industrial land uses (Table III-19). Based on land use, there was a 13.5 percent loss in forest acreage between 1973 and 2002 (Table III-19).

Natural Resources Article Section 5-103, known as the Maryland Reforestation Law, regulates disturbances to forest land during highway construction projects. Under this law, any highway project that impacts at least one acre of forest requires a strict 1:1 mitigation ratio if the highway project uses state funds. The Maryland Forest Conservation Act (FCA) of 1991 regulates forest impacts for most other projects, including private and public development projects. The FCA requires the preparation of a forest conservation plan for most impacts to forests that total more than 40,000 square feet. Unlike the Maryland Reforestation Law, the FCA does not require a strict 1:1 mitigation for all affected forests. Rather, the FCA protects “high priority” forests, and

sets forth reforestation and afforestation threshold percentages for any land undergoing development.

Cumulative impacts to forest cover are anticipated in the ICE area as a result of the build alternatives, as well as public and private development projects that may occur in each of the counties (Figures III.11 through III.13). Clearing of forested lands for the roadway improvements and proposed developments could also have an impact on forest dwelling species located within these areas of terrestrial habitat. Although some currently forested land is proposed for industrial or residential land purposes, much of the existing forest cover would remain due to FCA requirements for any proposed developments, which require that certain percentages of forest cover remain after the development has been constructed. Although there was a loss of forest acreage between 1973 and 2002, it is expected that the overall cumulative effects to terrestrial habitat within the ICE Analysis boundary area would be minimal based on current land uses in the project area. Given current Maryland Smart Growth policies, the county zoning regulations, and the two laws referenced above, most impacts to forest cover would only take place on areas designated by the counties for urban development, and mitigation would be required for most activities to offset any loss of forest habitat.

Farmland/Agricultural (Prime Farmland Soils)

Cumulative impacts to farmland/agricultural areas caused by development within the ICE Analysis boundary would include direct impacts to agricultural land by each of the build alternatives. The potential for additional cumulative effects to farmland would arise from the MD 295 project effects together with additional, unrelated development within the SCEA study area. As redevelopment pressure rises, there may be additional cumulative impacts to farmland and agricultural areas. However, local zoning regulations are also in place to protect these areas from development through the establishment of farmland and agricultural preservation goals, and participation in the Maryland Agricultural Land Preservation Program, which provides for the establishment of permanent preservation easements. Although cumulative impacts to farmlands and agricultural areas may occur within the ICE area, these impacts are expected to be minimal based on zoning restrictions and State and County preservation goals.

Rare, Threatened, and Endangered Species Habitat

Impacts to known occurrences of rare, threatened, and endangered plants in the project area would be avoided and minimized for the MD 295 project; however, cumulative impacts could occur due to the combined effects of the other proposed development projects within the ICE area. Habitat sufficient to support these species could be impacted by direct habitat loss, or by indirect effects that alter the quality of existing habitats. Cumulative effects would be avoided and minimized for each proposed development through required surveys to document new occurrences of any of these species. Impacts would be minimal due to current land use and state and federal laws. Maryland endangered and threatened species are protected and regulated by the 1973 Endangered Species Act (ESA), the Maryland Endangered Species Act of 1973 and the 1975 Maryland Nongame and Endangered Species Conservation Act. Given current Maryland Smart Growth policies and the counties zoning regulations, most impacts to plant habitat would only take place on those areas designated by the counties for urban development.

c) Conclusions

The proposed improvements to the MD 295 project area are consistent with objectives outlined in the Maryland State Highway CTP. The project would have no secondary impacts because there are no planned public or private development projects that are dependent upon improvements to the MD 295 project. There may be indirect effects due to the proposed interchange and improvements to Hanover Road. The construction of an interchange at Hanover Road may enhance the attractiveness of the project area to particular business interests, although such projects have been proposed to date. Any induced development would be compatible with current plans and zoning, and are also constrained by the ANZ program.

There could be cumulative impacts to all of the natural resources in the project area, including community resources, parks and recreation areas, wetlands and waterways, agricultural lands, rare, threatened and endangered species, groundwater and woodlands as a result of the MD 295 project as well as other proposed development within the ICE Analysis boundary. Some of these impacts may be minimal. These resources would be regulated by applicable state, local, and federal laws for avoidance, minimization, and/or mitigation. Cumulative effects to community resources would both beneficial and adverse due to proposed roadway improvements within the project area.

As required by SHA guidelines, avoidance and minimization strategies continue to be incorporated into the roadway design to reduce direct impacts to environmental resources. SHA would recommend mitigation for any direct impacts that remain following avoidance and minimization efforts.

Future development and growth within the ICE area will be molded by state and county land development plans. SHA will continue to work with local governments and agencies to promote beneficial controls and suggest that local jurisdictions develop resource preservation plans. However, efforts to avoid, minimize, and mitigate impacts caused by cumulative development within the ICE Analysis boundary would be beyond the control and funding authority of SHA. Anne Arundel, Howard, and Baltimore Counties and each individual municipality are ultimately responsible for monitoring and applying growth management techniques that result in development at a consistent pace with roadways and other necessary infrastructure. Mitigation for cumulative effects to environmental resources must be considered by the responsible parties and regulatory agencies.

J. Wild and Scenic Rivers

There are no federally designated Wild and Scenic Rivers within or close to the project area. The Severn River, located approximately 6 miles southeast of BWI, is a state-designated Scenic and Wild River as established by the Wild and Scenic Rivers Act and the Maryland Scenic and Wild Rivers Program. All the streams and tributaries in the project area drain away from the Severn River, into the lower North Branch Patapsco River to the north.

K. Coastal Zone Management

All of Anne Arundel County is included in the Maryland Coastal Zone. The Maryland Coastal Zone Management (CZM) Program is administered by the MDE and MD DNR. Many of the CZM requirements are associated with inter-agency review of permit applications, as described

in *A Guide to Maryland's Coastal Zone Management Program Federal Consistency Process* (MDE and MD DNR, 2004). The final EA will include documentation of state agency's determination on consistency with the Maryland CZM plan.

L. Children's Environmental Health and Safety Risks

Pursuant to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (April 21, 1997), the FAA revised their policies and procedures for compliance with NEPA [FAA Order 1050.1E (June 8, 2004)] to include the assessment of environmental health and safety risks resulting from airport development projects that may disproportionately affect children. According to 1050.1E, these risks include "risks to health or safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to" (Appendix A, Section 16.2b). The MD 295 project would not result in an adverse impact to the health or safety of children in the project area.

M. Light Emissions and Visual Impacts

Existing light emissions at and in the project area include vehicular traffic, aircraft, the airport terminal, administration buildings, commercial buildings, and navigational aids (NAVAIDs). NAVAIDs direct light upward towards airborne aircraft at an angle sufficient to avoid visual impacts to the surrounding area. The No-Build Alternative would have no adverse impacts from light emissions, nor would the surrounding community be subject to adverse visual impacts. Potential additional light emissions resulting from the build alternatives would include vehicular traffic utilizing the interchange, roadway, and direct access ramps as well as any street lights that would be added. Given the existing land use of the area, visual impacts resulting from light emissions are expected to be minimal.

N. Construction

Project construction could result in adverse impacts to air, noise, water, or traffic elements such as congestion and detours associated with any of the build alternatives. The proposed project would produce temporary fugitive dust emissions from construction activities and associated equipment. However, contractors would exercise Best Management Practices (BMPs) to reduce dust during the construction phase of the project. These emissions would be temporary and are not expected to adversely affect the area's air quality. Noise from construction equipment and related activities on site would be regulated through the development of a construction noise specification to minimize exposure outside of the construction area. Traffic-related impacts would be minimized by developing and implementing a Maintenance of Traffic Management Plan. All construction-related water quality impacts would be temporary, indirect, and would result from the removal of vegetation and grading activities, as well as the operation of earth-moving equipment. These temporary and indirect water quality impacts would likely result from soil erosion or sedimentation and the introduction of pollutants from construction machinery. BMPs would be employed to minimize adverse temporary impacts. Potential temporary water degradation would be avoided, minimized, and mitigated through the implementation of an approved Erosion and Sediment Control Plan, approved Stormwater Management Plan, and the terms and restrictions associated with the Joint Non-tidal Wetlands and Waterways permit.

O. Natural Resources and Energy Supply

Consideration of energy requirements associated with a transportation project normally fall under two categories: Those relating to increased consumption from stationary facilities (i.e., additional facilities requiring heat, cooling, and other energy consuming systems), and those involving substantial increases in vehicle movement and related fuel consumption.

Consideration of non-fuel natural resources is generally a concern if the proposed improvements will affect the ability to mine or collect natural resource materials, or if construction of the proposed project would require the use of materials that are in short supply. There are no known deposits of valuable natural resources located in the vicinity of the project that would be affected by the proposed improvements.

The MD 295 project is not anticipated to require the use of any construction materials that are unusual in nature or in short supply. Estimates of the type and quantity of materials necessary for the proposed improvements will be determined in later phases of development and their availability through coordination with local suppliers.

P. Pollution Prevention, and Solid Waste

Four primary laws have been passed governing the handling and disposal of hazardous materials, chemicals, substances, and wastes. The two statutes of most relevance are the Resource Conservation and Recovery Act [(RCRA) as amended by the Federal Facilities Compliance Act of 1992], and the Comprehensive Environmental Response, Compensation, and Liability Act [(CERCLA) as amended by the Superfund Amendments and Reauthorization Act). RCRA governs the generation, treatment, storage, and disposal of hazardous wastes, and the cleanup of releases into the environment resulting from current operations. CERCLA provides for the cleanup of former releases of hazardous substances into the environment that result from past operations. Implementation of these statutes in Maryland is under the direction of the MDE.

Impacts to solid waste management relate to the generation, handling and disposal of solid waste as a result of construction. Waste would be transported and disposed of as directed by the appropriate authorities. In removing trees, earth, and demolishing pavement, high quantities of solid waste may be generated. Felled tree debris would be disposed of in accordance with state and local regulations. None of the solid waste generated from the proposed project is anticipated to create capacity problems at the local landfill or require scheduled solid waste removal. The No-Build Alternative would not impact or have adverse effects on local landfill operations.

Comments and Coordination

IV. COMMENTS AND COORDINATION

Coordination with cooperating agencies, environmental resource agencies, organizations, community associations, and the public has been an important component of the MD 295 Project. This section summarizes the coordination efforts, and Appendix B contains copies of the correspondence noted in Tables IV-1 through IV-4.

A. Streamlined Process Coordination

1. Purpose and Need

The Purpose and Need Statement for the MD 295 Project Planning Study was presented to the agencies for review and comment in July 2005. Each agency concurred with the Purpose and Need. The Baltimore Metropolitan Council (BMC) provided comments which were addressed in the final Purpose and Need Statement and are reflected in Section I of this document. Table IV-1 provides a list of the agency correspondence regarding the statement of Purpose and Need.

Table IV-1: Purpose and Need Coordination

| Correspondence | To | From | Date |
|------------------------------------|-----|--------|---------|
| Concurrence on Purpose and Need | SHA | FHWA | 7/14/05 |
| Concurrence on Purpose and Need | SHA | COE | 7/11/05 |
| Concurrence on Purpose and Need | SHA | FWS | 7/30/05 |
| Concurrence on Purpose and Need | SHA | EPA | 7/19/05 |
| Correspondence on Purpose and Need | SHA | MDP | 7/13/05 |
| Correspondence on Purpose and Need | SHA | MDE | 3/8/07 |
| Correspondence on Purpose and Need | SHA | MD DNR | 7/15/05 |
| Correspondence on Purpose and Need | SHA | BMC | 7/18/05 |

2. Alternatives Retained for Detailed Study

The Alternatives Retained for Detailed Study (ARDS) were presented to the agencies for review and comment in July 2006. Each agency concurred with minor comments. Table IV-2 provides a list of the agency correspondence regarding the ARDS.

The Maryland Department of Planning provided comments related to pedestrian and bicycle compatibility at the proposed interchange and consideration of a hiker-biker trail along one side of Hanover Road. Pedestrian and bicycle facilities, as well as a hiker-biker trail, have been incorporated into the build alternatives, described in more detail in Section II of this document.

Both the U.S. Army Corps of Engineers (COE) and the Environmental Protection Agency (EPA) were concerned about the width of the proposed Hanover Road related to wetlands/waterways and Patapsco Valley State Park impacts, respectively. A narrower footprint was evaluated and is discussed in Parklands and Recreational Facilities in Section III.A.6.e (pages III-14 through III-16) and the Waters of the United States in Section III.E.2.c (pages III-33 to III-44). The SHA response to the COE is included in Appendix B on page 12, and the SHA response to the EPA is included on page 15 of Appendix B.

Table IV-2: Alternatives Retained for Detailed Study Coordination

| Correspondence | To | From | Date |
|--|-----|--------|---------|
| Concurrence with Minor Comment on ARDS | SHA | FHWA | 8/31/06 |
| Concurrence with Minor Comment on ARDS | SHA | COE | 8/1/06 |
| Concurrence with Minor Comment on ARDS | SHA | EPA | 9/7/06 |
| Concurrence with no comment on ARDS | SHA | MDE | 3/8/07 |
| Correspondence with comment on ARDS | SHA | MDP | 7/12/06 |
| Correspondence with comment on ARDS | SHA | MDP | 9/20/06 |
| Correspondence with no comment on ARDS | SHA | BMC | 9/20/06 |
| Concurrence with comment on ARDS | SHA | MD DNR | 11/9/06 |
| Correspondence with no comment on ARDS | SHA | MHT | 8/4/06 |
| Response to comments on ARDS | COE | SHA | 6/27/07 |
| Response to comments on ARDS | EPA | SHA | 7/19/07 |

3. Regulatory Agency Coordination

Additional agency coordination and correspondence is listed in Table IV-3.

Table IV-3: Agency Correspondence

| Correspondence | To | From | Date |
|---|----------------------------|--|----------|
| Environmental Review Response | SHA | MD DNR | 11/30/04 |
| Environmental Review Response | SHA | USFWS | 1/25/05 |
| Environmental Review Response | SHA | MD DNR | 3/31/05 |
| State Threatened Plant Species Coordination | SHA | MD DNR | 7/9/07 |
| Request for Park Information Response | SHA | MD DNR | 11/16/05 |
| Request for Park Information Response | SHA | AA Rec and Park | 6/28/05 |
| Section 4(f) Coordination | MD DNR | SHA | 5/29/07 |
| Section 4(f) Coordination | SHA | MD DNR | 7/10/07 |
| Section 4(f) Coordination | MD DNR | SHA | 8/27/07 |
| Section 4(f) Coordination | Anne Arundel Co. | SHA | 6/29/07 |
| Section 4(f) Temporary Use Concurrence | SHA | Anne Arundel Co. | 7/5/07 |
| APE and NRHP Concurrence Request | MHT | SHA | 12/21/05 |
| APE and NRHP Concurrence | SHA | MHT | 3/10/06 |
| Phase I Archeological Survey Concurrence | SHA | MHT | 5/15/06 |
| Wellhead Protection Information Request | MDE | A.D. Marble & Co. | 8/23/06 |
| Wellhead Protection Information Response | A.D. Marble & Co. | MDE | 8/23/06 |
| Effects on Emergency Services | SHA | Howard Co. Dept. of Police | 10/23/06 |
| Response to Emergency Services | Howard Co. Dept. of Police | SHA | 6/27/07 |
| Effects on Emergency Services | SHA | Howard Co. Dept. of Fire and Rescue Services | 10/25/06 |
| Effects on Emergency Services | SHA | Anne Arundel Co. Police Dept. | 3/6/07 |
| Right of Entry Agreement | SHA | MD DNR | 11/9/06 |

| Correspondence | To | From | Date |
|--|------|------|---------|
| Cooperating Agency Request | FAA | FHWA | 7/14/07 |
| Cooperating Agency Concurrence | FHWA | FAA | 7/28/07 |
| FAA Form 7460: Notice of Proposed Construction or Alteration | FAA | MAA | 7/26/07 |

4. Streamlined Process Meeting Minutes

Meetings were held with local, state, and federal agencies at critical points in the project planning process to keep the involved parties informed and solicit feedback. These meetings are listed in Table IV-4 and the minutes from them are included in Appendix B (pages 69 through 84).

Table IV-4: Streamlined Process Meeting Minutes

| Meeting | Purpose | Date | Agencies in attendance |
|--|---|----------|--|
| Scoping Team Meeting | Discuss the scope of the MD 295 Project Planning Study and obtain feedback from the team members | 3/10/05 | SHA, MDOT, MAA, FHWA, Anne Arundel Co., and Howard Co. |
| Purpose and Need Field Review | Discuss the project's draft Purpose and Need, receive informal agency comments, discuss various project issues, and conduct a site visit | 6/10/05 | SHA, USACE, USFWS, Baltimore Metropolitan Council, and MDP |
| Conceptual Alternatives Agency Field Meeting | Discuss the project's conceptual alternatives, receive informal agency comments, discuss various project issues, and conduct a site visit | 10/12/05 | SHA, Anne Arundel Co., MAA, EPA, USACE, USFWS, and FHWA |
| Project Planning Study Team Meeting | Update the team on the proposed alternatives being presented at the Alternatives Public Workshop | 11/14/05 | SHA, OMT, FHWA, Anne Arundel Co. |

B. Elected Officials Correspondence

A letter sent to an elected official that provides project information and seeks input on the stakeholders group is included in Appendix B (page 85).

C. Public Coordination/Comments

1. Stakeholders Group

A Stakeholders Group was formed for the MD 295 Project. The Stakeholders include local businesses and community associations. The role of the Stakeholders Group was to help SHA

identify community issues before going to the general public. The goal of this partnering effort between the Stakeholders Group and SHA is to provide an improvement that is responsive to the needs of both the community and future travel demands in the region. The Stakeholders Group identified issues relevant to the community early in the process.

The first meeting with the Stakeholders Group took place on February 16, 2005. The list of Stakeholders is shown below in Table IV-5. The purpose of the meeting was to introduce the Stakeholders to the proposal to improve MD 295 and Hanover Road and familiarize them with the Project Planning process. A meeting summary is included in Appendix B, page 86.

The Stakeholders Group identified the following issues as relevant to the community:

- Proximity of the project to neighborhoods and property impacts
- Reduction and improvement of traffic
- How BWI and the proposed project would affect the community
- Traffic flow to commercial areas

Table IV-5: Stakeholders

| Representative | Organization |
|--------------------|---|
| Andrew Bing | Kramer & Associates |
| Christine Bolewski | GM Pre-Flight |
| Rusty Bristow | Harmans Civic Association |
| E.A. Canale | Electronic Systems |
| Gene Condon | Arundel Mills |
| Marie Cook | Provinces Civic Association |
| Wayne Dixon | Harmans Civic Association |
| Patrick Fleming | Maryland Department of Transportation |
| Richard Forgo | Linthicum Shipley Improvement Association |
| Ken Glendenning | Linthicum Shipley Improvement Association |
| Linda Greene | BWI Business Partnership |
| Catherine Hill | Community Partnership |
| Robert Kramer | Kramer & Associates |
| Charles Levay | Peach Orchard Civic Association |
| Harry Mathews | Harmans Civic Association |
| Terry McDonnell | Crestwood Improvement Association |
| Betsy McMillion | Harwood Park Neighborhood Improvement Association |
| Christine O'Connor | Greater Elkridge Community Association |
| Mitch Weber | Heffner and Weber |
| Dan Wilderson, Sr. | Salaried Employees Association |
| Robin Bowie | Maryland Aviation Administration |

The SHA held a second meeting with the Stakeholders Group on October 11, 2005, to present the results of the Purpose and Need document, along with any materials or information requested at the first group meeting. The SHA presented and described the No-Build Alternative and four conceptual alternatives (Alternatives 2 through 5) to the group. The Project Team received and answered questions from various Stakeholders, and the group provided the Project Team with

suggestions on how to better convey and describe the project and alternatives. A summary of this meeting is included in Appendix B, page 90. A Business Coordination Meeting was held with representatives of the business community in the project area on May 24, 2006. The purpose of the meeting was to discuss future development in the project area and address any concerns or issues regarding the MD 295 project. A summary of the meeting is included in Appendix B, page 95. The third meeting with the Stakeholder Group was held on Wednesday October 25, 2006, to discuss changes and planning progress since the prior meeting on October 11, 2005, and since the Alternatives Public Workshop that was held on January 11, 2006 (summarized in the next section). The SHA and group discussed the ARDS, the addition of direct access ramps at MD 170, and the expansion of the project limits from Old Stoney Run Road to MD 170, including improvements to the Northrup Grumman entrance. The group was also informed of design changes that had been made as a result of previously expressed concerns regarding traffic, the connection to Hanover Road at the CSX tracks, and accomodating bicyclists. A summary of the meeting is included in Appendix B, page 97.

2. Public Workshop

A MD 295 Alternatives Public Workshop was held on January 11, 2006, at Lindale Middle School (415 Andover Road, Linthicum, Maryland). At the workshop, residents and other community representatives had an opportunity to ask questions, review, and comment on the conceptual designs of the proposed alternatives. Of the 94 people that attended the workshop, the majority were in favor of the MD 295 Project Planning Study, the construction of a new interchange at Hanover Road, and improvements to Hanover Road. Comment cards were provided to all attendees to complete and submit to SHA during or following the workshop. A total of 21 comment cards or notes were returned (Appendix B, pages 102 through 117), and the comments are briefly summarized below:

- Three attendees were not supportive of the proposed project
- Three attendees were not supportive of a new MD 295 interchange or improvements to Hanover Road
- Most of the comments expressed support for one or more of the build alternatives
- Concerns expressed regarding access to frontage properties along Hanover Road
- Concern expressed about minimizing residential impacts
- Concerns expressed about increased traffic along Hanover Road
- Concern about accommodating bicyclists and provision of a hiker-biker trail

As a result of input from the public at the workshop, Alternative 8 was added, a hiker-biker trail was added on the north side instead of a sidewalk, and the project limits were extended to include improvements to the Corporate Center Drive intersection as well as the Northrop Grumman entrance.

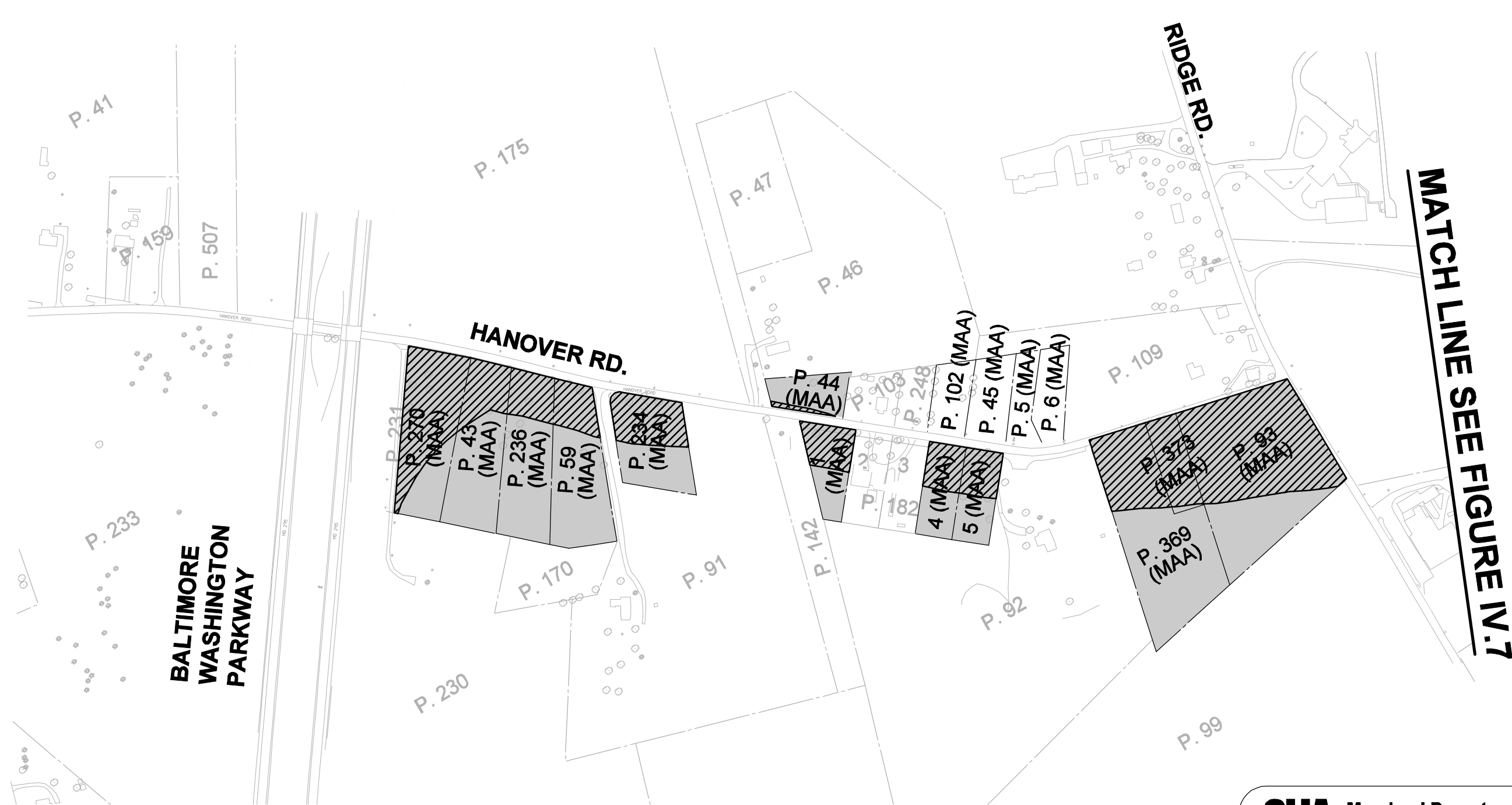
3. Other Outreach

Three religious institutions were contacted to ensure that members were aware of the project, offer continued coordination to address concerns, and reach out to potential minority or LEP groups. The Ban Suk Presbyterian Church in America was contacted by telephone on August 24, 2006. The Ohn-Nuree Mission Church and Gaines A.M.E. Church were each contacted by letter on November 13, 2006. Documentation of these outreach efforts is included in Appendix B, pages 118 through 120).

D. Release of Airport Real Property

The SHA and FHWA are coordinating with the MAA, and the FAA as a cooperating agency, regarding this EA and the proposed release of MAA-owned property that would be required for the proposed Hanover Road improvements. This section summarizes the environmental resources present on the MAA-owned parcels that would be affected by the MD 295 build alternatives. The fifteen affected parcels are located in Anne Arundel County between BWI and MD 295. Eleven of the parcels are located along Hanover Road between MD 295 and Ridge Road (Figures IV.1 through IV.6). The four remaining parcels are located along Stoney Run Road between the Consolidated Rental Car Facility and MD 170 (Aviation Boulevard) (Figure IV.7). The parcels are also noted on the alternatives mapping, Figures II.3 through II.9. Table IV-6 summarizes the affected MAA-owned parcels and the ROW associated with each of the MD 295 build alternatives.

The SHA is also coordinating with the MAA and FAA regarding the proposed direct access ramp from Stoney Run Road to southbound MD 170 that would fall within the MAA Runway Protection Zone. As initially designed, the ramp was potentially impacting an approach light at Runway 10 within the Runway Protection Zone. At the request of the MAA, SHA modified the horizontal alignment of the ramp to avoid impacting the approach light. The SHA submitted a Form 7460-1 (Notice of Proposed Construction or Alteration) to the FAA to ensure that the improvements within the Runway Protection Zone would not interfere with Federal Aviation Regulation Part 77 that establishes standards and notification requirements for objects potentially affecting navigable space. The MAA indicated that “the project does not appear to have any impact to Part 77” in letter to the FAA dated July 26, 2007 (Appendix B; page 65).



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE

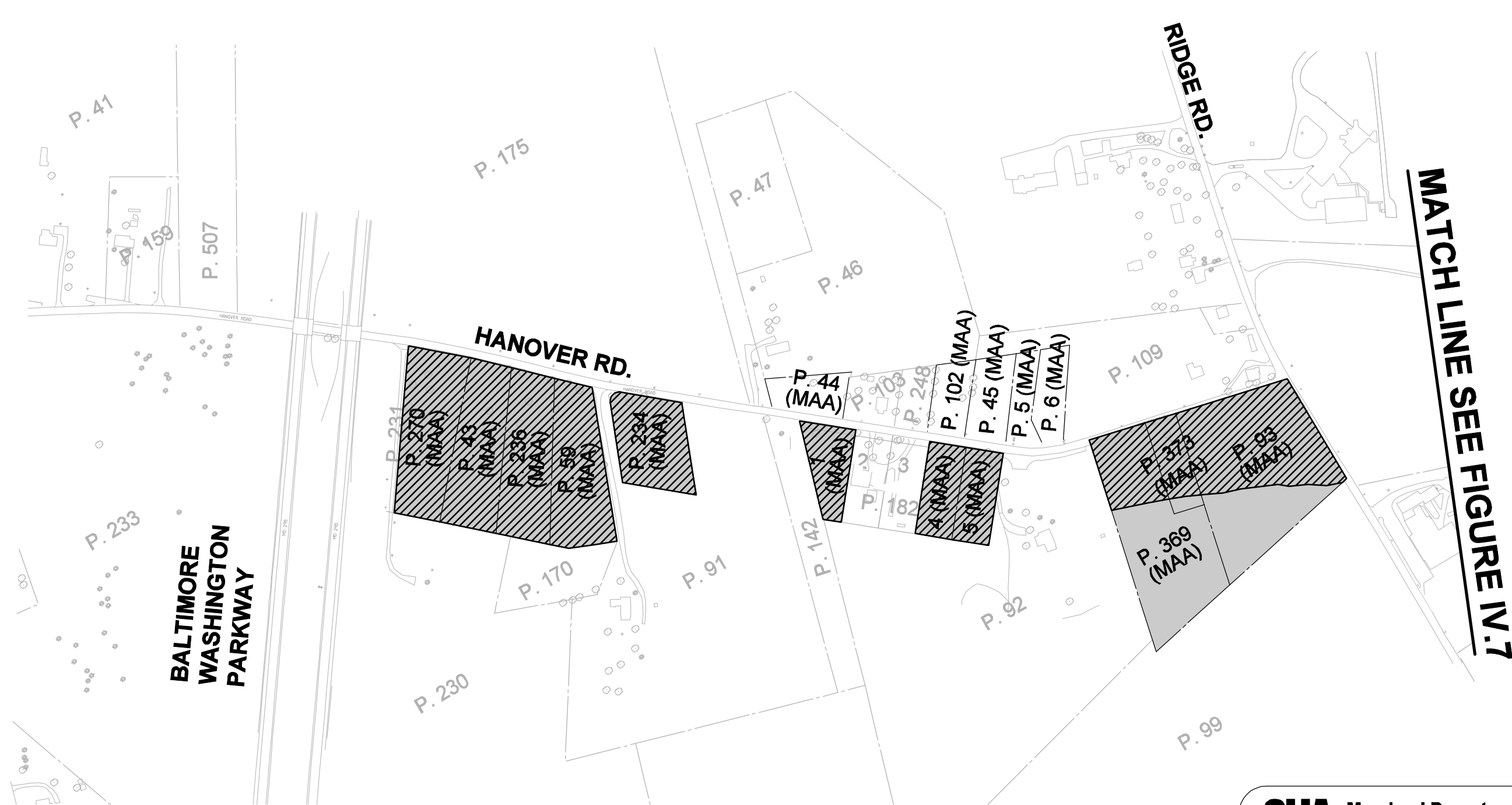


Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 3

| | | | | | |
|-------|-----------|------|-------------|--------|------|
| SCALE | 1" = 300' | DATE | AUGUST 2007 | FIGURE | IV.1 |
|-------|-----------|------|-------------|--------|------|



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE

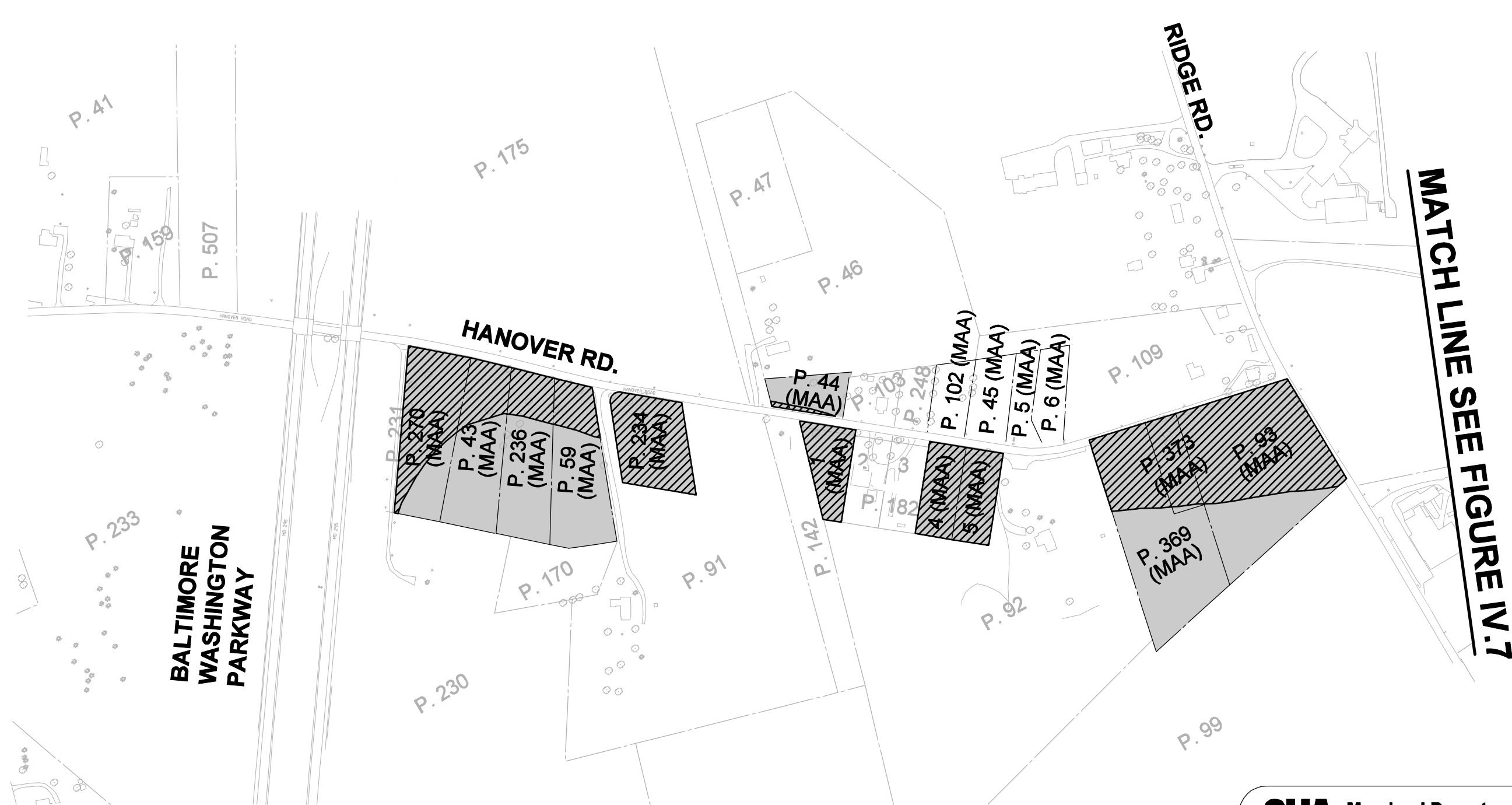


Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 3A

| | | | | | |
|-------|-----------|------|-------------|--------|------|
| SCALE | 1" = 300' | DATE | AUGUST 2007 | FIGURE | IV.2 |
|-------|-----------|------|-------------|--------|------|



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE



Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 4

SCALE

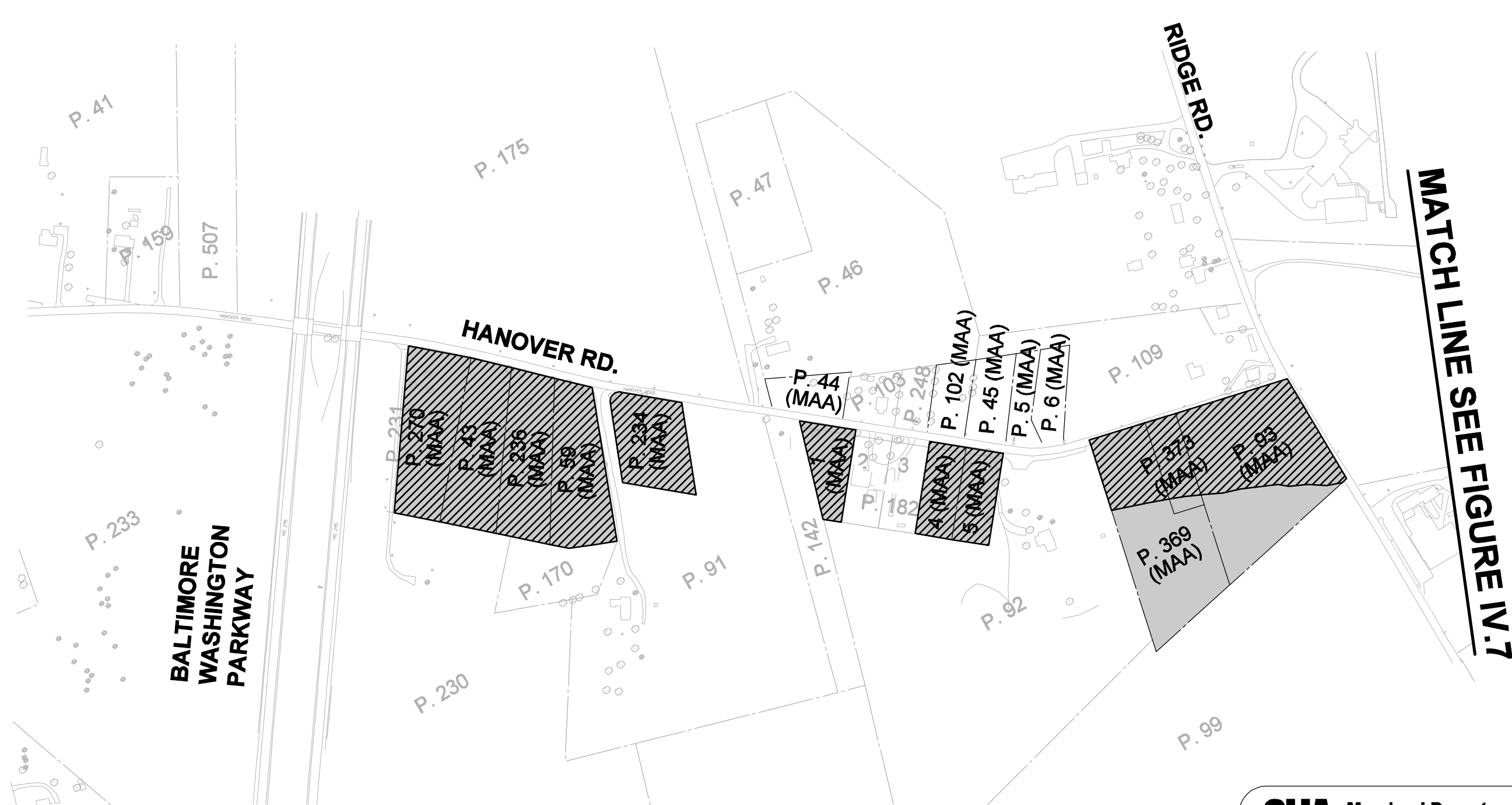
1" = 300'

DATE

AUGUST 2007

FIGURE

IV.3



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE



Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 4A

SCALE

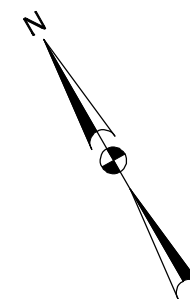
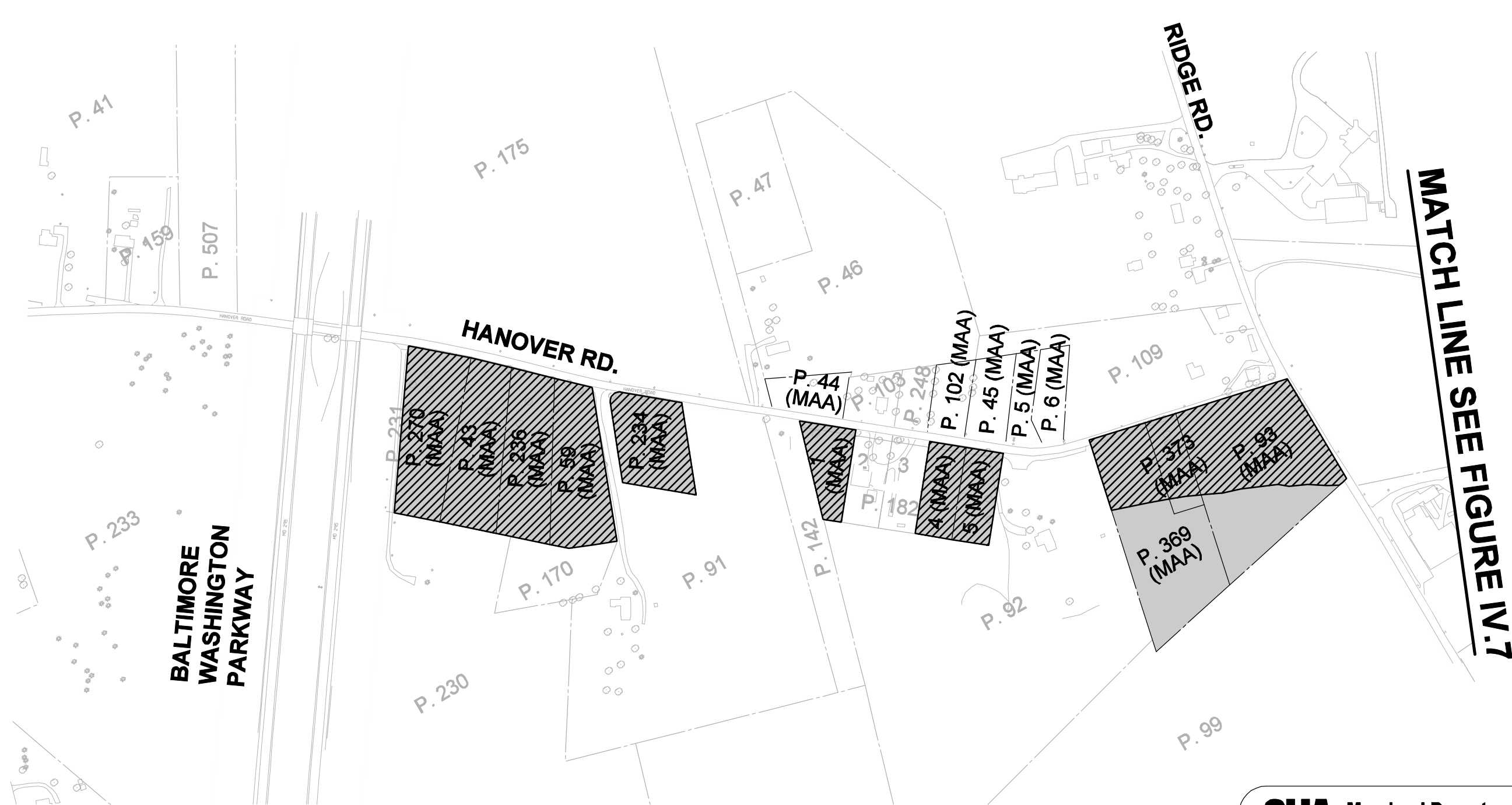
1" = 300'

DATE

AUGUST 2007

FIGURE

IV.4



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE

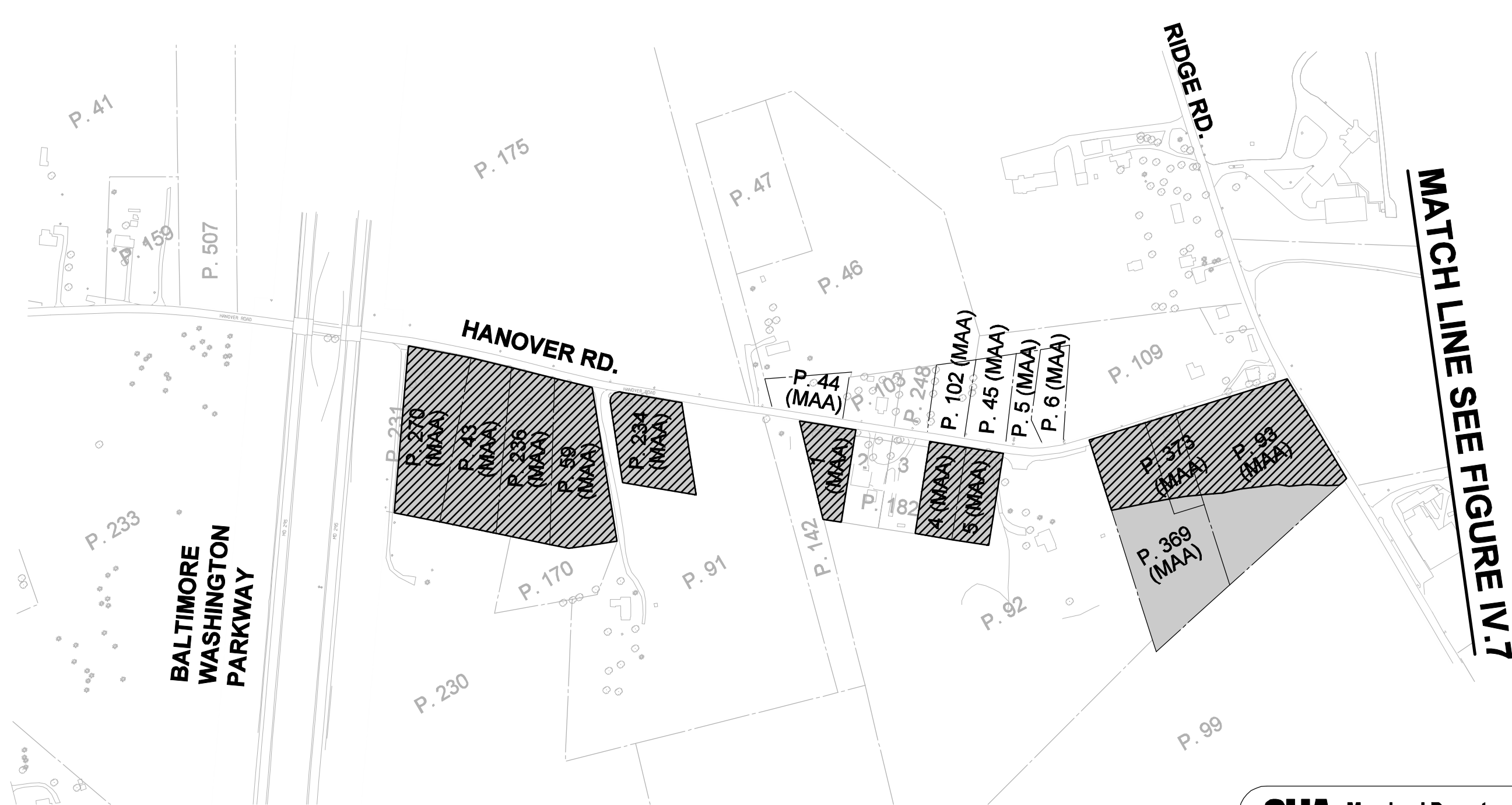


Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 7

| | | |
|--------------------|---------------------|----------------|
| SCALE 1" = 300' | DATE AUGUST 2007 | FIGURE IV.5 |
|--------------------|---------------------|----------------|



LEGEND

- AFFECTED MAA OWNED PARCELS
- MAA PROPERTY PROPOSED FOR RELEASE



Maryland Department of Transportation
State Highway Administration
Project Planning Division

MD 295 PROJECT PLANNING STUDY

Proposed Alternative 8

SCALE

1" = 300'

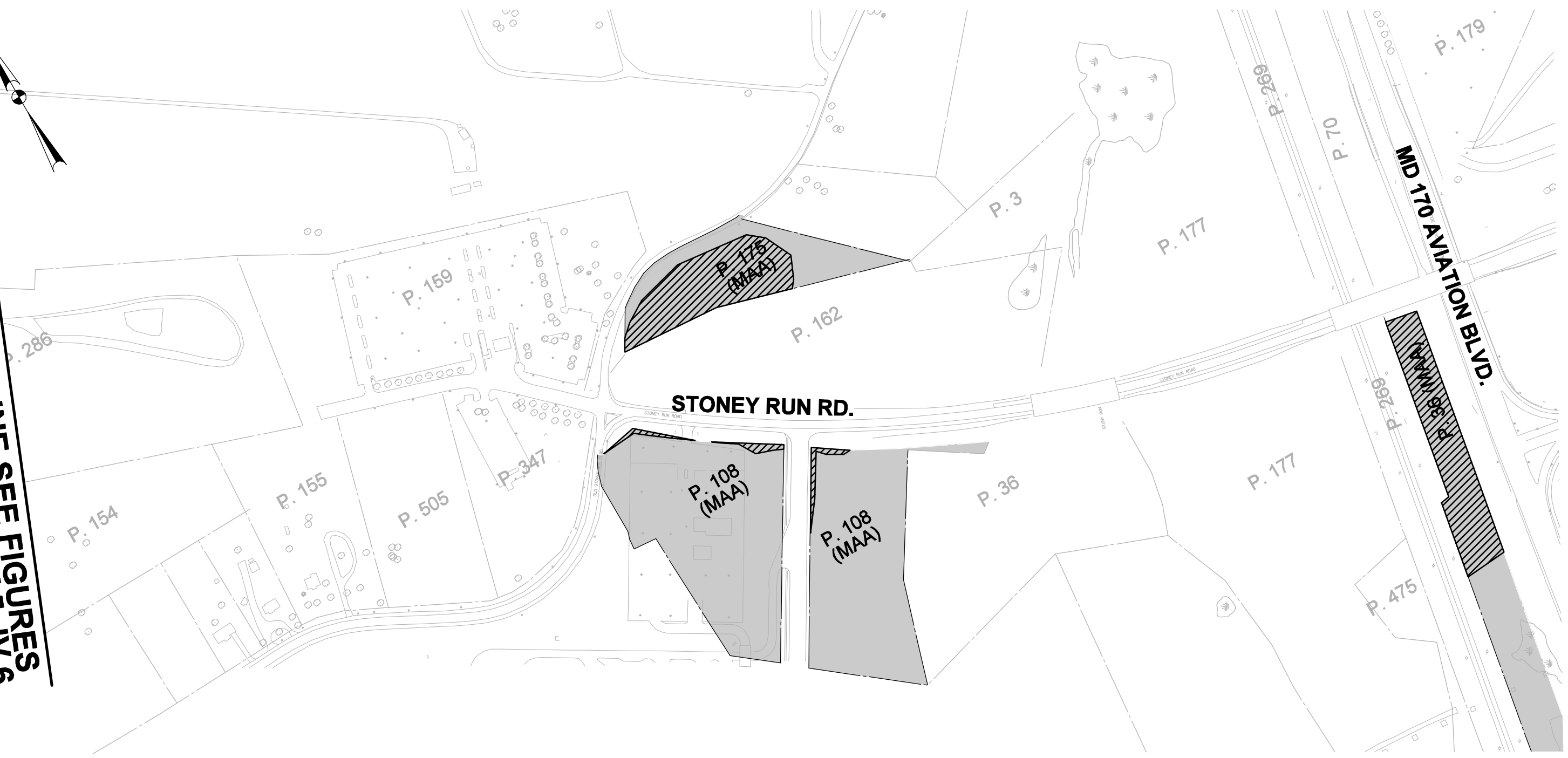
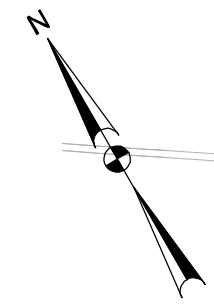
DATE

AUGUST 2007



FIGURE

IV.6

**MATCH LINE SEE FIGURES
IV.1, IV.2, IV.3, IV.4, IV.5, IV.6**



LEGEND

-  AFFECTED MAA OWNED PARCELS
-  MAA PROPERTY PROPOSED FOR RELEASE



**Maryland Department of Transportation
State Highway Administration
Project Planning Division**

MD 295 PROJECT PLANNING STUDY

Proposed Alternatives 3, 3A, 4, 4A, 7 and 8

| | | | | | |
|-------|-----------|------|-------------|--------|------|
| SCALE | 1" = 300' | DATE | AUGUST 2007 | FIGURE | IV.7 |
|-------|-----------|------|-------------|--------|------|

Table IV-6: MAA Parcels Affected by the MD 295 Project

| Affected MAA Parcel Number | Parcel Size (Acres) | Amount of Land to be Released (Acres) | | | | | |
|-------------------------------|------------------------|---------------------------------------|---------|--------|---------|--------|--------|
| | | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 |
| 43 | 1.24 | 0.43 | 1.24 | 0.43 | 1.24 | 1.24 | 1.24 |
| 44 | 0.50 | 0.04 | 0 | 0.04 | 0 | 0 | 0 |
| 59 | 1.40 | 0.33 | 1.40 | 0.33 | 1.40 | 1.40 | 1.40 |
| 93 | 3.16 | 2.28 | 2.11 | 2.28 | 2.11 | 2.11 | 2.11 |
| 108 | 9.91 | 0.19 | 0.14 | 0.19 | 0.19 | 0.19 | 0.19 |
| 175 | 3.09 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 |
| 182, Lot 1 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| 182, Lot 4 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| 182, Lot 5 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| 234 | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 |
| 236 | 1.35 | 0.34 | 1.35 | 0.34 | 1.35 | 1.35 | 1.35 |
| 270 | 1.49 | 1.11 | 1.49 | 1.11 | 1.49 | 1.49 | 1.49 |
| 369 | 2.49 | 0.78 | 0.74 | 0.78 | 0.74 | 1.24 | 0.74 |
| 373 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Total | 29.82 | 12.42 | 15.40 | 12.42 | 15.45 | 15.95 | 15.45 |

FAA Land Release Process

On September 30, 2005, the Office of the Inspector General released *Management of Land Acquired Under Airport Noise Compatibility Programs*. The basis of the audit is compliance with Grant Assurance 31 [codified at 49 USC 47101(c)], which states “for land purchased under a grant for airport noise compatibility purposes, it will dispose of land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time.” Pursuant to Grant Assurance 31, approval from the FAA is required to release the Airport sponsor from any one of the obligations carried on the land. For the FAA to properly consider a request for land release, the sponsor must present the following information to FAA for review and approval:

- The agreement(s) between the United States and the sponsor (AIP number).
- The specific request (long-term, total release, partial release, transfer, etc.).
- A reason to why the sponsor is proposing the release, modification, or the action.
- The facts and circumstances that justify such a request.
- The requirements of the state or local law that should be provided in the language of the FAA issued document granting the request.
- The property and/or facilities involved.
- How the property was obtained or acquired by the sponsor.
- The present conditions and present use of the property.
- The use of the property once released by the FAA.
- The Fair Market Value of the property, including a copy of a current appraisal.

- The proceeds that are expected from the use or disposition of the property.
- A comparison of the relative advantage or benefit to the sponsor from the sale or other disposition of the property.
- A metes and bounds description of the property to be released.
- A sketch or drawing of the property and its relative location.
- A status of the environmental review and determination.

In accordance with Section 125 of Public Law 10-181, upon receipt of the land release request, FAA will post the proposal in the Federal Register for a 30-day public review and comment period. The public notice requirement applies to land that was acquired for airport use with Federal assistance. This EA process serves as the environmental documentation the FAA requires in order to make an environmental determination on the effects of releasing any portion of MAA-owned property. By the FAA approving this document, they indemnify themselves of any environmental impacts that could occur after the property is released.

1. Cultural Resources

A.D. Marble & Company conducted a Phase I archeological survey in the study area in 2006 (Emory et al. 2007). Two potential sites were identified on MAA-owned land. Site 18AN1345, previously recorded as the Preston Gateway North Site B-1 (Maryland Historical Trust 2006), is located in Parcel 236. Site 18AN1353 is located on Parcels 369 and 373. The Phase I report concluded that neither site warranted further archeological investigation. The State Historic Preservation Officer concurred with the findings and conclusions in the Phase I report on May 15, 2007 (Appendix B, page 54).

2. Natural Resources

Natural resources and impacts on each MAA-owned parcel are described below. The parcel narratives are followed by a series of tables that summarize impacts to wetlands (Table IV-7), waterways (Table IV-8), highly erodible soils (Table IV-9), farmland soils of statewide importance (Table IV-10), and forest cover (Table IV-11), as determined from analysis of land use/land cover. No hydric or prime farmland soils would be impacted on the MAA parcels.

Parcel 36 – Parcel 36 is located between MD 170 and the AMTRAK/MARC railway lines immediately south of Stoney Run Road (Figure IV.7). This parcel would be affected by the direct access ramp from Stoney Run Road to southbound MD 170. No wetlands occur at this site. Approximately 96 linear feet of waterway (WUS) 79 would be impacted. WUS 79 is an ephemeral stormwater management channel constructed in uplands that flows in a westerly direction across the parcel. The waterway is approximately five feet wide at its eastern end but narrows to approximately two feet at its western end. At the time of the survey, it contained approximately four inches of standing water at its eastern end and was dry at its western end. Parcel 36 contains a farmland soil of statewide importance, with an impacted area of approximately 1.78 acres. Vegetation on the site includes a grassy fence line along the western boundary and a sparse stand of pine trees.

Parcel 43 – Parcel 43 is a 1.24-acre former home site located south of Hanover Road (Figures IV.1 through IV.6). It would be affected by all of the build alternatives, particularly Alternatives 3A, 4A, 7, and 8 that would relocate Hanover Road approximately 200 feet south of its existing alignment in the vicinity of the interchange. Parcel 43 contains a portion of wetland (WET) 11, a small, isolated wetland classified as a palustrine, broad-leaved deciduous forested (PFO1) wetland. The remainder of WET 11 is on the adjacent Parcel 236. The wetland is dominated by Nepal microstegium (*Microstegium viminea*), sensitive fern (*Onoclea sensibilis*), wrinkled goldenrod (*Solidago rugosa*), southern arrowwood (*Viburnum dentatum*), tulip tree (*Liriodendron tulipifera*), and red maple (*Acer rubrum*). Alternatives 4A and 8 would each impact 0.008 acre of WET 11. None of the build alternatives would impact waterways or farmland soils. Direct impacts to highly erodible soils range from 0.41 to 0.50 acre among Alternatives 3A, 4A, 7, and 8. The site contains a meadow and trees, including tulip tree, red maple, and black cherry (*Prunus serotina*).

Parcel 44 - Parcel 44 is a 0.50-acre former home site located on the north side of Hanover Road (Figures IV.1 through IV.6). It would be impacted by only by Alternatives 3 and 4. The 0.04 acre that would be released contains no wetlands, waterways, highly erodible soils, or farmland soils. The site consists of maintained lawn with scattered trees.

Parcel 59 - Parcel 59 is a 1.40-acre former home site located south of Hanover Road (Figures IV.1 through IV.6). There are no impacts to wetlands, waterways, farmland soils, or forests. Alternatives 3A, 4A, 7 and 8 would each impact 0.38 acre of highly erodible soils. The property is primarily meadow with a forested area at its southern end and a few additional scattered trees. Tree species include tulip tree, red maple and black cherry.

Parcel 93 - Parcel 93 is a 3.16-acre former home site located at the intersection of Hanover Road and Ridge Road (Figures IV.1 through IV.6). Approximately 2.28 acres would be released under Alternatives 3 and 4, and 2.11 acres for Alternatives 3A, 4A, 7, and 8. There are no wetlands or waterways on the parcel. Direct impacts to highly erodible soils would range from 1.20 to 1.32 acres among the build alternatives. Direct impacts to farmland soils of statewide importance would range from 1.20 to 1.96 acres among the build alternatives. The site is a patchy mix of forest and meadow.

Parcel 108 - Parcel 108 is 9.91 acres in size and spans both sides of New Ridge Road south of Stoney Run (Figure IV-7). The build alternatives would impact 0.14 to 0.19 acre along the edges of the parcel. No wetlands or waterways exist on the affected portions; however, a portion of WET 14, a Wetland of Special State concern, occupies other portions of the parcel. Each of the build alternatives would impact 0.04 acres of highly erodible soils and 0.13 acre of farmland soils of statewide importance. A building occupies the property on the west side of New Ridge Road. The property on the east side of New Ridge Road is forested with red maple, tulip tree, and black walnut (*Juglans nigra*). Each of the build alternatives would impact approximately 0.02 acre of forest cover.

Parcel 175 - Parcel 175 is a 3.09-acre former home site that borders Old Stoney Run Road north of Stoney Run Road (Figure IV.7). The build alternatives would each impact 1.74 acres for a proposed stormwater management site. No wetlands, waterways, or highly erodible soils exist

on the site. The project would impact approximately 1.74 acres of farmland soils of statewide importance. The parcel consists of an early successional field with scattered trees, shrubs, and a forested border. The site appears to have been disturbed as the ground surface is composed of a layer of gravel.

Parcel 182 – Parcel 182 includes Lots 1, 4 and 5. Lot 1 is 0.60 acre in size and Lots 4 and 5 are each 0.58 acre in size. All are located along the south side of Hanover Road (Figures IV.1 through IV.6) and would be impacted in their entirety as a result of the proposed improvements to Hanover Road. Lot 1 is a former home site. Lots 4 and 5 were a single lot with a home site on lot 5 at the time of MAA acquisition. None of the three lots contain wetlands, waterways, highly erodible soils, or farmland soils. Vegetation includes mowed lawn, scattered trees, and forest patches. Forest impacts on lot one would be 0.23 acre for Alternatives 3 and 4, and 0.12 acre for each of the remaining build alternatives. Alternatives 3A, 4A, 7 and 8 would impact 0.12 acres of forest on Lot 4, and 0.07 acre on Lot 5.

Parcel 234 – Parcel 234 is a 1.09-acre former home site located on the south side of Hanover Road adjacent to Parcel 53 (Figures IV.1 through IV.6). There are no wetlands or waterways on the parcel. Direct impacts to highly erodible soils range would from 0.24 to 0.60 acre among the alternatives, and the property contains no farmland soils. The parcel is approximately half meadow and half forested. Forest cover impacts would 0.30 acres for Alternatives 3 and 4, and 0.50 acre for Alternatives 3A, 4A, 7 and 8.

Parcel 236 - Parcel 236 is a 1.35-acre former home site located south of Hanover Road between Parcels 43 and 59 (Figures IV.1 through IV.6). Alternatives 3A, 4A, 7 and 8 would affect the entire parcel, while Alternatives 3 and 4 would impact only 0.34 acre of the property. A portion of WET 11 occurs on the site. This small isolated wetland was described under Parcel 36. Approximately 0.04 acres of WET 11 would be impacted by Alternatives 4A and 8. There are no waterways on the parcel. Impacts to highly erodible soils would range from 0.52 to 0.66 acres among alternatives 3A, 4A, 7 and 8. The parcel is approximately half forested and half field. Dominant trees include tulip tree, red maple, and black cherry.

Parcel 270 - Parcel 270 is a 1.49-acre former home site along Hanover Road between MD 295 and Parcel 43. It would be impacted by each of the alternatives. There are no wetlands on the parcel, but each of the build alternatives would impact between 117 and 121 linear feet of WUS 29. The waterway is an ephemeral stormwater management channel constructed in uplands that runs along the south side of Hanover Road. It has well defined banks, is approximately five feet wide, and contained no flow at the time of the survey. There are no impacts to highly erodible soils or farmland soils. Most of the parcel is wooded with a small field in its northern portion. The dominant trees in the forest stand are tulip tree, red maple, and black cherry.

Parcel 369 - Parcel 369 is a 2.49-acre former home site located south of Hanover Road adjacent to Parcels 93 and 373 (Figures IV.1 through IV.6). The build alternatives would impact from 0.74 to 1.24 acres of the property. There are no wetlands, waterways, highly erodible soils or farmland soils on the portion affected by the alternatives. The parcel is primarily forest with patches of meadow. Forest impacts would be approximately 0.6 acre for each of the build alternatives.

Parcel 373 - Parcel 373 is a small (0.50-acre), former home site that is sandwiched between Parcels 93 and 369 (Figures IV.1 through IV.6). The parcel contains no wetlands or waterways. Direct impacts to highly erodible soils and farmlands of statewide importance would range between 0.01 and 0.03 acre among the build alternatives. The site is a patchy mix of field and trees, and each of the alternatives would impact approximately 0.3 acre of forest cover.

Table IV-7. Wetland Impacts by MAA Parcel Number and Build Alternative

| MAA Parcel Number | Wetland Impacts (acres) | | | | | |
|-------------------|-------------------------|----------------|----------------|----------------|----------------|----------------|
| | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | 0 ¹ | 0 ¹ | 0 ¹ | 0 ¹ | 0 ¹ | 0 ¹ |
| 43 | 0 | 0 | 0 | 0.008 | 0 | 0.008 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59 | 0 | 0 | 0 | 0 | 0 | 0 |
| 93 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 |
| 182, Lot 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 182, Lot 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 182, Lot 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 |
| 236 | 0 | 0 | 0 | 0.035 | 0 | 0.035 |
| 270 | 0 | 0 | 0 | 0 | 0 | 0 |
| 369 | 0 | 0 | 0 | 0 | 0 | 0 |
| 373 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0.089 | 0.089 | 0.089 | 0.132 | 0.089 | 0.132 |

¹ The ramp from Stoney Run Road to southbound MD 170 which falls within MAA's Runway Protection Zone would impact 0.089 acres of wetlands outside of Parcel 36 within the SHA right-of-way.

Table IV-8: Waterway Impacts by MAA Parcel Number and Build Alternative

| MAA Parcel Number | Waterway Impacts (linear feet) | | | | | |
|-------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | 96 ¹ | 96 ¹ | 96 ¹ | 96 ¹ | 96 ¹ | 96 ¹ |
| 43 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59 | 0 | 0 | 0 | 0 | 0 | 0 |
| 93 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 |
| 182 Lots 1, 4 & 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 |
| 270 | 121 | 121 | 121 | 121 | 117 | 121 |
| 369 | 0 | 0 | 0 | 0 | 0 | 0 |
| 373 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 217 | 217 | 217 | 217 | 217 | 217 |

¹ The ramp from Stoney Run Road to southbound MD 170 which falls within MAA's Runway Protection Zone would also impact 150 linear feet of waterways (ephemeral stormwater management channels) outside of Parcel 36 within the SHA right-of-way, and 13 linear feet of waterways in Parcel 269.

Table IV-9: Impacts to Highly Erodible Soils by MAA Parcel Number and Alternative

| MAA Parcel | Impacts to Highly Erodible Soils (acres) | | | | | |
|-------------------|--|---------|--------|---------|--------|--------|
| | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| 43 | 0 | 0.41 | 0 | 0.50 | 0.43 | 0.50 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59 | 0 | 0.38 | 0 | 0.38 | 0.38 | 0.38 |
| 93 | 1.31 | 1.20 | 1.32 | 1.20 | 1.20 | 1.20 |
| 108 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 |
| 182 Lots 1, 4 & 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234 | 0.24 | 0.60 | 0.24 | 0.60 | 0.60 | 0.60 |
| 236 | 0 | 0.52 | 0 | 0.66 | 0.52 | 0.64 |
| 270 | 0 | 0 | 0 | 0 | 0 | 0 |
| 369 | 0 | 0 | 0 | 0 | 0 | 0 |
| 373 | 0.03 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 |
| Total | 1.62 | 3.17 | 1.63 | 3.39 | 3.19 | 3.38 |

Table IV-10: Impacts to Farmland Soils of Statewide Importance by MAA Parcel Number and Alternative

| MAA Parcel | Impacts to Farmland Soils of Statewide Importance (acres) | | | | | |
|-------------------|---|---------|--------|---------|--------|--------|
| | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 |
| 43 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59 | 0 | 0 | 0 | 0 | 0 | 0 |
| 93 | 1.31 | 1.96 | 1.32 | 1.20 | 1.20 | 1.20 |
| 108 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| 175 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 |
| 182 Lots 1, 4 & 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 |
| 270 | 0 | 0 | 0 | 0 | 0 | 0 |
| 369 | 0 | 0 | 0 | 0 | 0 | 0 |
| 373 | 0.03 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 |
| Total | 4.99 | 4.85 | 5.00 | 4.89 | 4.89 | 4.89 |

Table IV-11: Forest Impacts by MAA Parcel Number and Build Alternative

| MAA Parcel | Impacts to Forest Cover (acres) | | | | | |
|--------------|---------------------------------|---------|--------|---------|--------|--------|
| | Alt. 3 | Alt. 3A | Alt. 4 | Alt. 4A | Alt. 7 | Alt. 8 |
| 36 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | <0.01 | 0 | <0.01 | 0 | 0 | 0 |
| 59 | 0 | 0 | 0 | 0 | 0 | 0 |
| 93 | 1.57 | 1.50 | 1.58 | 1.50 | 1.50 | 1.50 |
| 108 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| 175 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 | 1.74 |
| 182, Lot 1 | 0.23 | 0.12 | 0.23 | 0.12 | 0.12 | 0.12 |
| 182, Lot 4 | 0 | 0.12 | 0 | 0.12 | 0.12 | 0.12 |
| 182, Lot 5 | 0 | 0.07 | 0 | 0.07 | 0.07 | 0.07 |
| 234 | 0.30 | 0.50 | 0.30 | 0.50 | 0.50 | 0.50 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 |
| 270 | 0 | 0 | 0 | 0 | 0 | 0 |
| 369 | 0.60 | 0.62 | 0.60 | 0.62 | 0.62 | 0.62 |
| 373 | 0.33 | 0.34 | 0.33 | 0.34 | 0.34 | 0.34 |
| Total | 4.78 | 5.04 | 4.80 | 5.04 | 5.04 | 5.04 |

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Appendix A: Uniform Relocation Assistance Act

**SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE
MARYLAND STATE HIGHWAY ADMINISTRATION**

All State Highway Administration projects utilizing Federal funds must comply with the provisions of the Uniform Relocation and Real Property Acquisition Policies Act of 1970 (42 USC 4601) as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), Public Law 105-117 in 1997, and Title 49 CFR Part 24 in 2005. State-funded projects must comply with Sections 12-112 and Subtitle 2, Sections 12-201 to 12-212, of the Real Property Article of the Annotated Code of Maryland.

The State Highway Administration's Office of Real Estate administers the Relocation Assistance Program for the Maryland Department of Transportation.

The aforementioned Federal and State laws require that the State Highway Administration provide relocation assistance payments and advisory services to eligible persons who are displaced by a public project. There are two categories of residential occupants: 180-day owner-occupants and 90-day tenants and short-term owner-occupants. Non-residential occupants may be businesses, farms or non-profit organizations.

A displaced person that has owned and occupied a subject dwelling for at least 180 days prior to the initiation of negotiations for the property may receive a replacement housing payment of up to \$22,500. The replacement housing payment is composed of three parts: a purchase price differential; an increased mortgage interest differential; and reimbursement for incidental settlement expenses.

The purchase price differential is the difference between the value paid by the State Highway Administration for the existing dwelling and the cost to the displaced owner of a comparable replacement dwelling, as determined by the State's replacement housing study.

The increased mortgage interest differential is a payment made to the owner at the time of settlement on the replacement dwelling to negate the effects of less favorable financing in the new situation. The payment is calculated by use of the "buy-down" mortgage method.

Reimbursable incidental expenses are necessary and reasonable incidental costs that are incurred by the displaced person in purchasing a replacement dwelling, excluding pre-paid expenses such as real estate taxes and insurance. The maximum reimbursable amount for these incidental expenses is based upon the cost of the comparable selected in the replacement housing study.

A displaced person who has leased and occupied a subject dwelling for at least 90 days prior to the initiation of negotiations for the property may receive a replacement rental housing payment of up to \$5,250. The replacement rental housing payment is the difference between the

monthly cost of housing for the subject dwelling, plus utilities, and the monthly cost of housing for a comparable replacement rental unit, plus utilities, over a period of 42 months. Owner-occupants of 90-179 days prior to the initiation of negotiations for the subject dwelling are eligible for the same replacement rental housing payments as tenants.

As an alternative to renting, a displaced tenant-occupant may elect to apply the rental replacement housing eligibility amount toward the down payment needed to purchase a replacement dwelling.

The comparable properties used in calculating any replacement housing payment eligibility must comply with all local standards for decent, safe and sanitary (DS&S) housing and be within the financial means of the displaced person.

If affordable, comparable DS&S replacement housing cannot be provided within the statutory maximums of \$22,500 for 180-day owner-occupants or \$5,250 for 90-day tenants or short-term owners, the maximums may be exceeded on a case-by-case basis. This may only be done after the completion and approval of a detailed study that documents the housing problem, explores the available replacement options and selects the most feasible and cost-effective alternative for implementation.

In addition, eligible displaced residential occupants may be reimbursed for the expense of moving personal property up to a maximum distance of fifty (50) miles, using either an actual cost or fixed schedule method.

Actual cost moves are based upon the lower of at least two commercial moving estimates and must be documented with receipted bills or invoices. Other incidental moving expenses, such as utility reconnection charges, may also be paid in the same manner.

As an alternative method, the fixed schedule move offers a lump sum, all-inclusive payment based upon the number of rooms to be moved. Other incidental costs are not separately reimbursable with this method.

Non-residential displaced persons such as businesses, farms or non-profit organizations may also receive reimbursement for the expense of relocating and re-establishing operations at a replacement site on either an actual cost or fixed payment basis.

Under the actual cost method, a non-residential displaced person may receive reimbursement for necessary and reasonable expenses for moving its personal property, the loss of tangible personal property that is not moved, the cost of searching for a replacement site and a re-establishment allowance of up to \$10,000.

The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Payments for the actual reasonable expenses are limited to a 50-mile radius

unless the State determines a longer distance is necessary. The expenses claimed for actual cost moves must be supported by firm bids and receipted bills. An inventory of the items to be moved must be prepared in all cases. In self-moves, the State will negotiate an amount for payment, usually lower than the lowest acceptable bid. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business vehicles or equipment, wages paid to persons who participate in the move, the cost of actual supervision of the move, replacement insurance for the personal property moved, costs of licenses or permits required and other related expenses.

In addition to the actual moving expenses mentioned above, the displaced business is entitled to receive a payment for the actual direct losses of tangible personal property that the business is entitled to relocate but elects not to move. These payments may only be made after an effort by the owner to sell the personal property involved. The costs of the sale are also reimbursable moving expenses.

If the business elects not to move or to discontinue the use of an item, the payment shall consist of the lesser of: the fair market value of the item for continued use at the displacement site, less the proceeds from its sale; or the estimated cost of moving the item.

If an item of personal property which is used as part of a business or farm operation is not moved and is promptly replaced with a substitute item that performs a comparable function at the replacement site, payment shall be the lesser of: the cost of the substitute item, including installation costs at the replacement site, minus any proceeds from the sale or trade-in of the replaced item; or the estimated cost of moving and reinstalling the replaced item.

In addition to the moving payments described above, a business may be eligible for a payment up to \$10,000 for the actual reasonable and necessary expenses of re-establishing at the replacement site. Generally, re-establishment expenses include certain repairs and improvements to the replacement site, increased operating costs, exterior signing, advertising the replacement location, and other fees paid to re-establish. Receipted bills and other evidence of these expenses are required for payment. The total maximum re-establishment payment eligibility is \$10,000.

In lieu of all moving payments described above, a business may elect to receive a fixed payment equal to the average annual net earnings of the business. This payment shall not be less than \$1,000 nor more than \$20,000. In order to be entitled to this payment, the State must determine that the business cannot be relocated without a substantial loss of its existing patronage; the business is not part of a commercial enterprise having more than three other establishments in the same or similar business that are not being acquired; and the business contributes materially to the income of a displaced owner during the two taxable years prior to the year of the displacement. A business operated at the displacement site solely for the purpose of renting to others is not eligible. Considerations in the State's determination of loss of existing patronage are the type of business conducted by the displaced business and the nature of the

clientele. The relative importance of the present and proposed locations to the displaced business and the availability of suitable replacement sites are also factors.

In order to determine the amount of the “in lieu of” moving expense payment, the average annual net earnings of the business is to be one-half of the net earnings before taxes during the two taxable years immediately preceding the taxable year in which the business is relocated. If the two taxable years are not representative, the State may use another two-year period that would be more representative. Average annual net earnings include any compensation paid by the business to the owner, owner’s spouse, or dependents during the period. Should a business be in operation less than two years, the owner of the business may still be eligible to receive the “in lieu of” payment. In all cases, the owner of the business must provide information to support its net earnings, such as income tax returns, or certified financial statements, for the tax years in question.

Displaced farms and non-profit organizations are also eligible for actual reasonable moving costs up to 50 miles, actual direct losses of tangible personal property, search costs up to \$2,500 and re-establishment expenses up to \$10,000 or a fixed payment “in lieu of” actual moving expenses of \$1,000 to \$20,000. The State may determine that a displaced farm may be paid a minimum of \$1,000 to a maximum of \$20,000 based upon the net income of the farm, provided that the farm has been relocated or the partial acquisition caused a substantial change in the nature of the farm. In some cases, payments “in lieu of” actual moving costs may be made to farm operations that are affected by a partial acquisition. A non-profit organization is eligible to receive a fixed payment or an “in lieu of” actual moving cost payment, in the amount of \$1,000 to \$20,000 based on gross annual revenues less administrative expenses.

A more detailed explanation of the benefits and payments available to displaced persons, businesses, farms and non-profit organizations is available in the brochure entitled, “Relocation Assistance – Your Rights and Benefits,” that will be distributed at the public hearing for this project and be given to all displaced persons.

Federal and State laws require that the State Highway Administration shall not proceed with any phase of a project which will cause the relocation of any persons, or proceed with any construction project, until it has furnished satisfactory assurances that the above payments will be provided, and that all displaced persons will be satisfactorily relocated to comparable decent, safe and sanitary housing within their financial means, or that such housing is in place and has been made available to the displaced persons.


In addition, the requirements of Public Law 105-117 provides that a person who is an alien and is not lawfully present in the United States shall not be eligible for relocation payments or other assistance under the Uniform Act. It also directed all State displacing agencies that utilize Federal funds in their projects to implement procedures for compliance with this law in order to safeguard that funding. To this end, displaced persons will be asked to certify to their

citizenship or alien status prior to receiving payments or other benefits under the Relocation Assistance Program.

Appendix B: Comments and Coordination Correspondence

| <u>PURPOSE AND NEED</u> | |
|---|---|
| Project Name & Limits: MD 295: from MD 100 to I-95 and Henover Road; from Cooks Cola Drive in Howard County to MD 170, Anne Arundel County | |
| Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document): | |
| <input checked="" type="checkbox"/> Concurs (without comments) <input type="checkbox"/> Concurs (w/ minor comments) | <input type="checkbox"/> Does Not Concur |
| Comments / Reasons for Non-Concurrence: | |
| <small><i>Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.</i></small> | |
| <input type="checkbox"/> National Park Service <input type="checkbox"/> MD Dept. of the Environment <input type="checkbox"/> MD Historical Trust <input type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Org. <input type="checkbox"/> MD Dept. of Natural Resources | |
| <input type="checkbox"/> Provides Comments (below or attached) <input type="checkbox"/> Has No Comments | |
| Comments: | |
| Additional Information Needed: | |
| Signature: <i>[Signature]</i> | Date: July 14, 2005 |

65903

| <u>PURPOSE AND NEED</u> | |
|---|---|
| Project Name & Limits: MD 295; from MD 100 to I-195 and Hanover Road; from Coca Cola Drive in Howard County to MD 170, Anne Arundel County. | |
| Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document): | |
| <input checked="" type="checkbox"/> Concurs (without comments) <input type="checkbox"/> Concurs (w/ minor comments) <input type="checkbox"/> Does Not Concur | <input type="checkbox"/> Federal Highway Administration <input checked="" type="checkbox"/> Corps of Engineers <input type="checkbox"/> Environmental Protection Agency <input type="checkbox"/> Fish and Wildlife Service |
| Comments / Reasons for Non-Concurrence: | |
| <i>Notes: Please do not provide "conditional" concurrence. You should either concur with the information as provided without comments or with minor comments) or not concur until revisions are made or additional information is provided.</i> | |
| <input type="checkbox"/> National Park Service <input type="checkbox"/> MD Dept. of the Environment <input type="checkbox"/> MD Historical Trust <input type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Org. <input type="checkbox"/> MD Dept. of Natural Resources | |
| <input type="checkbox"/> Provides Comments (below or attached) <input type="checkbox"/> Has No Comments | |
| Comments: | |
| Additional Information Needed: | |
| Signature:  | Date: 7.11.05 |

6/6/00

| | |
|---|------------------------------|
| <p>PURPOSE AND NEED</p> <p>Project Name & Limits: MD 295; from MD 100 to I-95 and Hanover Road; from Coca Cola Drive in Howard County to MD 170, Anne Arundel County</p> <p>Having reviewed the attached Purpose and Need concurrence comment package and the summary presented above, the following agency (by signing this document):</p> <p> <input type="checkbox"/> Federal Highway Administration <input type="checkbox"/> Environmental Protection Agency <input checked="" type="checkbox"/> Corps of Engineers <input checked="" type="checkbox"/> Fish and Wildlife Service </p> <p> <input checked="" type="checkbox"/> Concurs (without comments) <input type="checkbox"/> Concurs (w/ minor comments) <input type="checkbox"/> Does Not Concur </p> <p>Comments / Reasons for Non-Concurrence:</p> | |
| <p><i>Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.</i></p> <p> <input type="checkbox"/> National Park Service <input type="checkbox"/> MD Dept. of the Environment <input type="checkbox"/> MD Historical Trust <input type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Org. <input type="checkbox"/> MD Dept. of Natural Resources </p> <p> <input type="checkbox"/> Provides Comments (below or attached) <input type="checkbox"/> Has No Comments </p> <p>Comments:</p> | |
| <p>Additional Information Needed:</p> | |
| <p>Signature: <u>William Schuch</u></p> | <p>Date: <u>07/30/05</u></p> |

PURPOSE AND NEED

Project Name & Limits: MD 295 from MD 100 to I-195 and Hanover Road; from Coxa Cola Drive in Howard County to MD 170, Anne Arundel County

Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document):

☒ Federal Highway Administration ☐ Corps of Engineers
☒ Environmental Protection Agency ☐ Fish and Wildlife Service

☒ Concurs (without comments) ☐ Concurs (w/ minor comments) ☐ Does Not Concur

Comments / Reasons for Non-Concurrence:

Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.

☐ National Park Service ☐ MD Dept. of the Environment ☐ MD Historical Trust
☐ National Marine Fisheries Service ☐ MD Department of Planning ☐ Metropolitan Planning Org.
☐ MD Dept. of Natural Resources

☐ Provides Comments (below or attached) ☐ Has No Comments

Comments:

Additional Information Needed:

Signature: *[Signature]* Date: 7-17-05

sent 9/2/05

09/00
TWTG: B 07

| PURPOSE AND NEED | |
|---|---|
| Project Name & Limits: MD 295; from MD 100 to I-195 and Hanover Road; from Coas Cola Drive in Howard County to MD 170, Anne Arundel County | |
| Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document): | |
| <input type="checkbox"/> Concur (without comments) | <input type="checkbox"/> Concur (w/ minor comments) |
| <input type="checkbox"/> Does Not Concur | |
| Comments / Reasons for Non-Concurrence: | |
| Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided. | |
| <input type="checkbox"/> National Park Service <input type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> MD Dept. of Natural Resources | <input checked="" type="checkbox"/> MD Dept. of the Environment <input checked="" type="checkbox"/> MD Department of Planning <input type="checkbox"/> MD Historical Trust <input type="checkbox"/> Metropolitan Planning Org. |
| Comments: <i>See attached comments.</i> | |
| Additional Information Needed: | |
| Signature: <i>David T. Whitaker, AICP</i> | Date: <i>7/13/05</i> |

6/9/02

MDP Comments on the Purpose and Need for the MD 295/Hanover Road Project
(An Attachment to the Purpose and Need Concurrence Form)

July 12, 2005

We appreciate that SHA revised some contents of the purpose and need statement and included land use maps in response to our comments on the preliminary draft statement. We notice that the project purpose statement on page 4 has been revised, but the statement in the two-page summary has not. Furthermore, we think the project needs summarized in the two-page summary do not fully reflect the key points that are discussed in the document from page 3 to 8. The needs that are missing in the two-page summary are inadequate roadway network and capacity, traffic operation deficiency and safety concerns in the future. SHA may want to point out these needs in the summary sheet.

3/26/07 10:47:10 AM

PURPOSE AND NEED

Project Name & Limits: MD 295 Project Planning Study
MD 295: From MD 100 to I-195 and,
Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County
Having reviewed the attached Purpose and Need concurrence/comment package and the
summary presented above, the following agency (by signing this document):

☐ Federal Highway Administration ☐ Corps of Engineers
☐ Environmental Protection Agency ☐ Fish and Wildlife Service
☐ Concurs (without comments) ☐ Concurs (w/ minor comments) ☐ Does Not Concur
Comments / Reasons for Non-Concurrence:

Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.

☐ National Park Service ☒ MD Dept. of the Environment ☐ MD Historical Trust
☐ National Marine Fisheries Service ☐ MD Department of Planning ☐ Metropolitan Planning Org.
☐ MD Dept. of Natural Resources

☐ Provides Comments (below or attached) ☒ Has No Comments

Comments:

Additional Information Needed:


Signature: Ellen A. Higgins Date: 3/8/07

Send to:

Theresa Christian
State Highway Administration
707 N. Calvert Street
Mail Stop C-301
Baltimore, MD 21202

Or fax to: 410-209-5004

| | |
|--|--|
| <h2 style="margin: 0;">PURPOSE AND NEED</h2> | |
| Project Name & Limits: MD 295; from MD 100 to I-195 and Hanover Road; from Coca Cola Drive in Howard County to MD 170, Anne Arundel County | |
| Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document): | |
| <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Concurs (without comments) <input type="checkbox"/> Concurs (w/ minor comments) <input type="checkbox"/> Does Not Concur </div> <div> Comments / Reasons for Non-Concurrence: </div> </div> | |
| Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided. | |
| <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> National Park Service <input type="checkbox"/> MD Dept. of the Environment <input type="checkbox"/> MD Historical Trust <input checked="" type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Org. <input type="checkbox"/> MD Dept. of Natural Resources </div> <div> <input checked="" type="checkbox"/> Provides Comments (below or attached) <input type="checkbox"/> Has No Comments </div> </div> | |
| Comments: | |
| Additional Information Needed: | |
| Signature: <u>Ray C. Dintaman, Jr.</u> Date: <u>July 14, 2005</u> | |



Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
C. Ronald Franks, Secretary

July 15, 2005

Mr. Joseph Kresslein
 Maryland Department of Transportation
 State Highway Administration
 Project Planning Division
 P.O. Box 370
 Baltimore MD 21203-0717


Dear Mr. Kresslein:

This letter is in response to the June 30, 2005 State Highway Administration letter of request for Department of Natural Resources comments on the Purpose and Need Statement for the MD 295/Hanover Road Study; MD 295 from MD 100 to I-195 and Hanover Road from Coca Cola Drive to MD 170, Anne Arundel County, Project No. AA372A11. The Department has had staff review the subject Purpose and Need Statement, as well as attend the presentation and discussion of the related information at the June 15, 2005 Interagency Review meeting. The Department also plans to have staff participate in the continued interagency review process for this document and subsequent planning efforts.

The Department has no comments on the Purpose and Need Statement. We advocate and support the consideration and optimized protection of natural resources within the project study area during planning and any implementation of this project. The project's study area is known to support several natural resources of special interest, so we advocate early coordination on these issues through the normal natural resource coordination process for projects of this type.

If you have any questions concerning these comments, you may contact Greg Golden of my staff at 410-269-8334.

Sincerely,


 Ray C. Dintaman, Jr., Director
 Environmental Review Unit

Tawes State Office Building • 580 Taylor Avenue • Annapolis, Maryland 21401
 410.260.BDNR or toll free in Maryland 877.620.BDNR • www.dnr.maryland.gov • TTY users call via Maryland Relay

| | |
|--|---|
| <p align="center"><u>PURPOSE AND NEED</u></p> | |
| <p>Project Name & Limits: MD 295: from MD 100 to I-195 and Hanover Road: from Coca Cola Drive in Howard County to MD 170, Anne Arundel County</p> | |
| <p>Having reviewed the attached Purpose and Need concurrence/comment package and the summary presented above, the following agency (by signing this document):</p> | |
| <p>___ Concurs (without comments) ___ Concurs (w/ minor comments) ___ Does Not Concur</p> | <p>___ Corps of Engineers ___ Fish and Wildlife Service</p> |
| <p>Comments / Reasons for Non-Concurrence:</p> | |
| <p>Note: Please do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.</p> | |
| <p>___ National Park Service ___ National Marine Fisheries Service ___ MD Dept. of Natural Resources</p> | <p>___ MD Dept. of the Environment ___ MD Department of Planning ___ MD Historical Trust ___ Metropolitan Planning Org.</p> |
| <p><input checked="" type="checkbox"/> Provides Comments (below or attached) ___ Has No Comments</p> | |
| <p>Comments:</p> | |
| <p>Additional Information Needed:</p> | |
| <p>Signature: <u>Regina Aris</u></p> | <p>Date: <u>July 18, 2005</u></p> |

| | |
|--|---|
| <p>Baltimore Metropolitan Council</p> <p>2700 Lighthouse Point East, Suite 310 Baltimore, MD 21224-4774 Telephone: (410) 732-0500 Fax: (410) 732-8248 www.baltimoremetro.org</p> | <p>July 18, 2005</p> |
| <p>Mr. Bruce M. Grey Deputy Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, MD 21202</p> | <p>Attn: Mr. Joseph R. Kresslein Assistant Division Chief Project Planning Division</p> |
| <p>Re: Project No. AA 372A11 MD 295 from MD 100 to I-195 and Hanover Road from Coca Cola Drive to MD 170 Anne Arundel County, Maryland</p> | <p>Dear Mr. Grey:</p> |
| <p>The Baltimore Metropolitan Council (BMC) appreciates the opportunity to comment on the Purpose and Need statement for the MD 295/Hanover Road Study. Please find attached a list of comments developed by our staff while reviewing the document provided by SHA.</p> | |
| <p>I would also like to inform you that the Baltimore Regional Transportation Board (BRTB) is scheduled to approve a resolution endorsing the MD 295/Hanover Road Study Purpose and Need Statement at their July 26, 2005 Board meeting. This is as per the Congestion Management System (CMS) guidelines adopted by the Board that requires that all major regional projects be reviewed and endorsed at three major stages of project planning - Purpose and Need, Alternates Retained for Detailed Study, and Selected Alternate/Conceptual Mitigation.</p> | |
| <p>If you have any questions, please feel free to contact me (410-732-9572) or Bala Akundi (410-732-0500 x 1019).</p> | |
| <p>Sincerely,</p> <p align="right"><i>Regina Aris</i> Regina Aris Manager, Plan & Policy Development</p> | |
| <p>Attachment cc: Mr. Patrick Fleming (MDOT) Mr. Harvey S. Bloom (BMC)</p> | |

Anne Arundel County
Baltimore County
Carroll County
Howard County



MD 295 Purpose and Need Statement BMC Comments

1. Page 3 – Project Background – BMC is listed as one of the agencies that is part of a group of state and local interests formed in 2001 to provide support for projects in the BWI area. While it may have been intended for BMC to be a part of this group, we were never actively engaged in any discussions towards the growth around BWI airport.
2. Page 6 – 1st paragraph - BMC recently completed a report on a license plate survey conducted in October 2004 that shows some changes in the regional patterns of originating patrons. MAA is currently reviewing the final report. It may be appropriate, with MAA's permission, to update this paragraph and Figure 2 with more recent data from the 2004 survey.
3. Page 6 – 2nd paragraph – per MAA forecasts, the number of origin and destination air passengers is supposed to double by 2025. On the previous page, there is reference to the number of origin and destination passengers forecasted to grow to nearly 35 million annual passengers by 2020. The projected traffic volumes on MD 295 are for design year 2030. There seems to be some inconsistency in the use of horizon year that needs to be addressed.
4. Page 7 – The 2003 BWI/Linthicum Small Area Plan identifies 2,000 acres of commercial and industrial development with a total employment of over 55,000. Is this current land use or projected estimates? Also, towards the end of the 2nd paragraph, the current projections call for a 20 percent increase in employment in the immediate vicinity of BWI. By what year is this increase expected to happen?
5. Page 10 – It would be helpful to have the maps showing the ramp numbering along with Tables 2 and 3.
6. Page 12 – The first sentence refers to MD 295 having posted speed limits averaging 55 mph. Is this a reference to posted speed or average observed speed? The table numbers are incorrectly referenced – Table 4 is the intersection analysis for the Hanover Road area on the previous page. Table 6 contains the crashes by collision type, year, accident rate and comparable statewide average rate for MD 295. Tables 7 and 8 contain accident data for Hanover Road/Stoney Run Road.
7. Page 15 – The Base Realignment and Closure report was released earlier this spring and includes a net gain of about 5,600 employees.

ALTERNATIVES RETAINED FOR DETAILED STUDY

Project Name & Limits: MD 295 Project Planning Study
 MD 285: From MD 100 to I-196 and,
 Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County

Having reviewed the attached Alternatives Retained for Detailed Study conceptual comment package and the summary presented above, the following agency (by signing this document):

☒ Federal Highway Administration ☐ Fish and Wildlife Service ☐ MD Dept. of Natural Resources
☐ Environmental Protection Agency ☐ National Park Service ☐ MD Dept. of the Environment
☐ Corps of Engineers ☐ National Marine Fisheries Service

☐ Concurs (without comments) ☒ Concurs (w/ minor comments) ☐ Does Not Concur

Comments / Reasons for Non-Concurrence: *His our understanding that as a part of the project, the alternatives and a part of the study process, we are providing a "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.*

☐ MD Historical Trust ☐ MD Department of Planning ☐ Metropolitan Planning Organization
☐ Provides Comments (below or attached) ☐ Has No Comments

Comments:

Additional Information Needed:

Signature: *[Signature]* Date: *08.31.06*

Send to:
 Theresa Christian
 State Highway Administration
 707 N. Calvert Street
 Mail Stop C-30
 Baltimore, MD 21202
 Or fax to: 410-208-6004

ALTERNATIVES RETAINED FOR DETAILED STUDY

| | |
|--|--|
| Project Name & Limits: MD 295 Project Planning Study MD 295: From MD 100 to I-195 and, Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County | |
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| <input type="checkbox"/> Federal Highway Administration <input type="checkbox"/> Environmental Protection Agency <input checked="" type="checkbox"/> Corps of Engineers | <input type="checkbox"/> Fish and Wildlife Service <input type="checkbox"/> National Park Service <input type="checkbox"/> National Marine Fisheries Service |
| <input type="checkbox"/> MD Dept. of Natural Resources <input type="checkbox"/> MD Dept. of the Environment | <input type="checkbox"/> MD Dept. of Planning <input type="checkbox"/> Metropolitan Planning Organization |
| <input type="checkbox"/> MD Historical Trust | <input type="checkbox"/> Has No Comments |
| Comments: | |
| Additional Information Needed: | |
| Signature: <u>[Signature]</u> | Date: <u>8/1/06</u> |

AUG02/06 PM 1:58 OPPE



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT ENGINEERS
P.O. BOX 1711
BALTIMORE, MD 21203-1711

SEVEN
ATTENTION OF

AUG 0 1 2006

Operations Division

Maryland State Highway Administration
Attn: Mr. Joseph Kresslein
Project Planning Division
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kresslein:

The U.S. Army Corps of Engineers/Baltimore District (Corps) has completed its review of the Alternatives Retained for Detailed Study developed for the MD295: (From MD100 to I-195, and Hanover Road from Technology Drive in Howard County to MD170 in Anne Arundel County) Project and offers comments below.

- 1) The Corps recommends that the median width, as proposed at Hanover Road should be reduced to avoid and/or minimize impacts to wetlands and waterways.
- 2) There are a number of small roads that cross Stony Run located both upstream and downstream of the proposed project. These roads could be removed and wetlands created to satisfy any compensatory mitigation that would be required for impacts associated with the construction of the project.

If you have any questions concerning this matter, please contact me at 410.962.4503.

Sincerely,

[Signature]

Stephen M. Etkin
Biologist
Maryland Northern Permits Section



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor

John D. Pocsul, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation

June 27, 2007

Re: Project No. AA372A11

MD 295: from MD 100 to I-195 and,
Hanover Road: from High Tech Drive, Howard
County to MD 170,
Anne Arundel County, MD

Mr. Steve Elinsky
US Army Corps of Engineers
Baltimore District (CENB-OP-RT)
PO Box 1715
Baltimore, MD 21203-1715

Dear Mr. Elinsky,

Thank you for your letter dated August 1, 2006 regarding the MD 295 alternatives retained for detailed study, and for meeting with us on May 15 to discuss the proposed direct access ramps to MD 170. This letter is in response to your comments and suggestions.

Hanover Road is being designed as a secondary access to the Baltimore Washington Thurgood Marshall International Airport (BWI) and BWI-related service areas. The twenty-foot median proposed at Hanover Road was designed to accommodate left turn lanes at intersections. In addition to providing adequate width to accommodate a twelve-foot turning lane, a six-foot minimum median width is required for pedestrian refuge in order to comply with the Americans with Disabilities Act (ADA). A minimum of eighteen feet is required to accommodate a single left turn lane plus the required pedestrian refuge.

The Maryland State Highway Administration (SHA) is committed to working with the US Army Corps of Engineers (COE) and other resource agencies, in designing an alignment which minimizes impacts to aquatic and other resources while developing a safe, context sensitive roadway. We will evaluate your suggested reduction of the median width from twenty to eighteen feet to further reduce environmental impacts, and will address the feasibility of your recommendation in the Preferred Alternative/Conceptual Mitigation package.

Mr. Steve Elinsky
Project No. AA372A11 – MD 295/Hanover Road
Page Two

Concerning your request to remove small roads that are currently crossing Stony Run upstream and downstream of the proposed project, these roads are currently used and owned by the Maryland Aviation Administration (MAA) and CSX railway respectively. The SHA will coordinate with the owners of the respective roadways to determine whether it is feasible to remove these roadways and use these areas for compensatory mitigation for the impacts associated with the construction of the project.

At a meeting held on May 15, 2007, you requested that SHA investigate an alternative to the direct access ramps at MD 170. The ramps had been added to the project from southbound MD 170 onto Stony Run Road (Ramp 1) and from Stony Run Road to southbound MD 170 (Ramp 2).

Your suggestion included designing Ramp 2 as close to the railroad tracks as possible, with Ramp 1 going beneath the existing bridge, then looping to tie in with Ramp 2. The attached map shows the configuration for the ramps you proposed. The American Association of State Highway and Transportation Officials (AASHTO) guidelines indicate that ramp design speeds (related to the highway design speed) should be 35 mph or at the least 25 mph. The limited area between the railroad tracks and MD 170 (Aviation Boulevard) would only allow a ramp with a design speed of less than 20 mph to be constructed in that location. Therefore, from a design and safety perspective the ramp you proposed would not meet AASHTO standards and is not feasible.

The design speed for your proposed Ramp 1 would be further reduced to 15 mph or less due to a recommendation made by the MAA subsequent to the meeting of May 15. Ramp 2 is within the BWI airport's Runway Protection Zone, and MAA requested that Ramp 2 be modified to tie onto MD 170 much sooner to avoid impacts to an approach light to the airport that cannot be removed or replaced. This adjustment to Ramp 2 further constricts the area between the Ramp 2 and MD 170, and would result in a smaller area for your proposed Ramp 1.

You indicated that if the design proposed for the ramps was not feasible, mitigation to the streams on the north side of Stony Run Road would be required. The MD 295 project team will pursue further coordination with the COE and the other resource agencies to determine the type and extent of mitigation that would be required.

Mr. Steve Elinsky
Project No. AA372A11 – MD 295/Hanover Road
Page Three

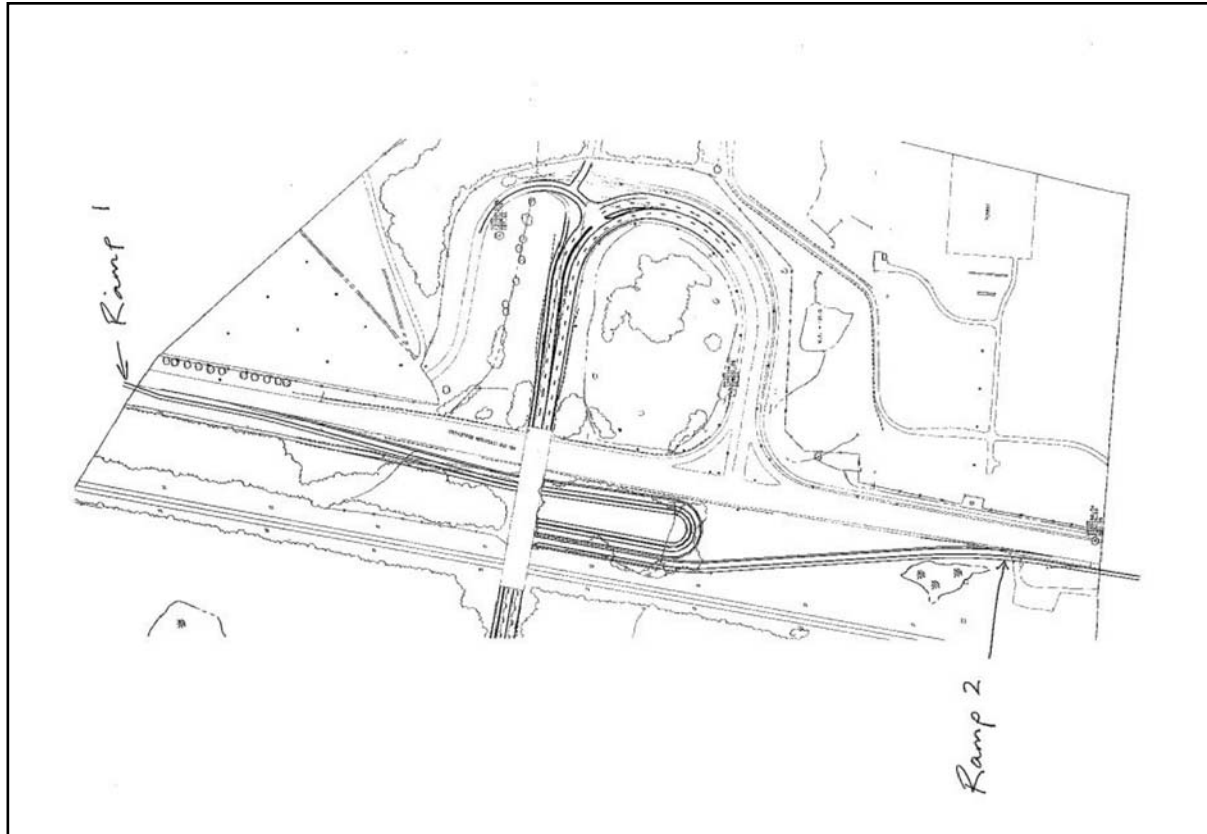
We hope that this letter addresses your concerns. We will continue our coordination throughout the development of this project and welcome any input you may have regarding reducing impacts to aquatic resources. Should you have any questions or need additional information, please feel free to contact Ms. Theresa Christian, the Environmental Manager, at 410-545-8697; or Ms. Carmelella Harris, Project Manager, at 410-545-8522.

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by: 
Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

cc: Mr. Dennis Atkins, SHA-PPD
Ms. Theresa Christian, SHA-PPD
Mr. Bruce Grey, SHA-PPD
Ms. Carmelella Harris, SHA-PPD
Mr. Joseph Kresslein, SHA-PPD



ALTERNATIVES RETAINED FOR DETAILED STUDY

Project Name & Limits: MD 295 Project Planning Study
MD 295: From MD 100 to I-195 and,
Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County

Having reviewed the attached Alternatives Retained for Detailed Study concurrence/comment package and the summary presented above, the following agency (by signing this document):

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Federal Highway Administration | <input type="checkbox"/> Fish and Wildlife Service | <input type="checkbox"/> MD Dept. of Natural Resources |
| <input type="checkbox"/> Environmental Protection Agency | <input type="checkbox"/> National Park Service | <input type="checkbox"/> MD Dept. of the Environment |
| <input type="checkbox"/> Corps of Engineers | <input type="checkbox"/> National Marine Fisheries Service | |

___ Concurs (without comments) ☒ Concurs (w/ minor comments) ___ Does Not Concur

Comments / Reasons for Non-Concurrence:
See attached letter


Note: Do not provide "conditional" concurrences. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.

___ MD Historical Trust ___ MD Department of Planning ___ Metropolitan Planning Organization

___ Provides Comments (below or attached) ___ Has No Comments

Comments:

Additional Information Needed:

Signature:  **Date:** 9-7-06

Send to:
Theresa Christien
State Highway Administration
707 N. Calvert Street
Mail Stop C-301
Baltimore, MD 21202

Or fax to: 410-209-5004



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 7, 2006

Ms. Carmelella Harris, Project Manager
State Highway Administration
707 N. Calvert Street, MS C-301
Baltimore, Maryland 21202

Re: MD 295(Baltimore Washington Parkway) From MD 100 to I-195 and Hanover Road, Anne Arundel County, Alternatives Retained for Detailed Study (ARDS), August 2006


Dear Ms. Harris,

In accordance with the Maryland Streamlined Environmental and Regulatory Process and as an interagency partner cooperating to fulfill the requirements of the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has received and reviewed the above referenced document. Overall, the EPA agrees with the alternatives identified in the ARDS for the EIS study, with the following points of discussion.

EPA has expressed concern in meetings with SEA about the width of the proposed typical section for Hanover Road. The Patuxent Valley State Park avoidance measures, especially the width of Hanover Road, are not given the same level of detail as other options. For instance, a narrower section does not appear in any of the figures which show alternatives and options, nor is there an alternative typical section. The description of the limited value of the park seems a pre-judgment. EPA expects a complete evaluation of a two lane section west of the interchange, or possibly a three lane (with a center turn) configuration. Development and consideration to a narrower typical section should be incorporated in the EIS for the length of Hanover Road. Avoidance of park and aquatic resources, and minimization and maintenance of wetland and floodplain function where impacts are unavoidable, is the focus of concern for EPA.

Thank you for the opportunity to review and comment on this document. The Agency looks forward to continued cooperation in the evaluation of impacts and protection of natural resources in the MD 295 project study area. If you have any questions, feel free to contact me at (215) 814-3522.

Sincerely,


Barbara J. Rudnick
Maryland Transportation Liaison
Environmental Programs Branch

Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.
Customer Service Hotline: 1-800-458-2474

Ms. Barbara J. Rudnick
Project No. AA372A11 – MD 295/Hanover Road
Page 3

We hope that this letter addresses your concerns. We will continue to coordinate with the EPA throughout the development of this project and welcome any input you may have. Should you have any questions or need additional information, please feel free to contact Ms. Theresa Christian, the Environmental Manager, at 410-545-8697; or Ms. Carmelella Harris, the Project Manager, at 410-545-8522 (toll free at 800-548-5026).

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by:


Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

cc: Mr. Dennis Atkins, SEA-PPD
Ms. Theresa Christian, SHA-PPD
Mr. Bruce Grey, SHA-PPD
Ms. Carmelella Harris, SHA-PPD
Mr. Joseph Kresslein, SEA-PPD

ALTERNATIVES RETAINED FOR DETAILED STUDY

Project Name & Limits: MD 295 Project Planning Study
MD 295: From MD 100 to I-195 and
Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County

Having reviewed the attached Alternatives Retained for Detailed Study concurrence/comment package and the summary presented above, the following agency (by signing this document):

| | | |
|--|--|---|
| <input type="checkbox"/> Federal Highway Administration | <input type="checkbox"/> Fish and Wildlife Service | <input type="checkbox"/> MD Dept. of Natural Resources |
| <input type="checkbox"/> Environmental Protection Agency | <input type="checkbox"/> National Park Service | <input checked="" type="checkbox"/> MD Dept. of the Environment |
| <input type="checkbox"/> Corps of Engineers | <input type="checkbox"/> National Marine Fisheries Service | |

☒ **Concurs (without comments)** ☐ **Concurs (w/ minor comments)** ☐ **Does Not Concur**

Comments / Reasons for Non-Concurrence:

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| | | |
|--|--|---|
| <input type="checkbox"/> MD Historical Trust | <input type="checkbox"/> MD Department of Planning | <input type="checkbox"/> Metropolitan Planning Organization |
|--|--|---|

☐ **Provides Comments (below or attached)** ☐ **Has No Comments**

Comments:

Additional Information Needed:

Signature: *Ellen A. Higgins* Date: 3/8/07

Send to:
Theresa Christian
State Highway Administration
707 N. Calvert Street
Mail Stop C-301
Baltimore, MD 21202

Or fax to: 410-209-5004

ALTERNATIVES RETAINED FOR DETAILED STUDY

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|--|--|
| Project Name & Limits: MD 295 Project Planning Study MD 295: From MD 100 to I-195 and, Hanover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County | |
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| <input type="checkbox"/> MD Historical Trust <input checked="" type="checkbox"/> Provides Comments (below or attached) | <input checked="" type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Organization |
| Comments: <i>Please see attached comments dated July 10, 2006</i> | |
| Additional Information Needed: | |
| Signature: <i>[Signature]</i> | Date: <i>7/12/06</i> |

July 10, 2006

MDP Comments on the Alternatives Retained for Detailed Study – MD 295/Hanover Road Project

Pedestrian and Bicycle Access

As part of the proposed improvements for the project, bicycle and pedestrian access is being studied. The typical section of the improved Hanover Road will include sidewalks on both side of the road and a 16-foot wide cube lane in each direction to accommodate bicycles. To make bicycle and pedestrian facility safe and user friendly along Hanover Road, the project team should carefully consider pedestrian and bicycle compatibility at the proposed interchange of Hanover Road and I-295. The project team should be aware that a Single Point Urban Interchange (SPUI) usually is not safe and user friendly to pedestrians and bicyclists. A SPUI is designed with a larger/longer size of an intersection on the surface street to efficiently move high volumes of vehicle traffic. Such a larger intersection area is much more difficult or may not be possible for pedestrians and bicycles crossing the street within a single signal phase. Special pedestrian/bicycle design features and traffic signal accommodations should be considered for a SPUI.

The Alternative maps show a section of a proposed hiker-biker trail from the end of the project limit on Hanover Road to MD 170 connecting the BWI trail. We suggest as an option of the project, the study team consider a hiker-biker trail along one side of Hanover Road. The option could be a trail in lieu of a sidewalk on one side of Hanover Road.

Page 12, Socioeconomic Resources

Since the project meets the guideline requirements for determining if a growth-related transportation project is located within a priority funding area, we suggest deleting the sentence of "the majority of the MD 295 study corridor is located within the Anne Arundel PFA..." and state that the project is located within the priority funding areas.

The document should discuss that the project is consistent with the Anne Arundel County general and small area plans.

Does the Howard County Master Plan call for Hanover Road and MD 295 improvements? If not, the project should be evaluated to determine if the project is generally consistent with the Howard County planning and economic development goals.

ALTERNATIVES RETAINED FOR DETAILED STUDY

| | | | |
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| Note: Do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided. | | | |
| <input type="checkbox"/> MD Historical Trust <input checked="" type="checkbox"/> MD Department of Planning <input type="checkbox"/> Metropolitan Planning Organization | <input type="checkbox"/> Provides Comments (below or attached) <input type="checkbox"/> Has No Comments | | |
| Comments: <i>Thank you for responding to our comments on the draft ARPS document.</i> | | | |
| Additional Information Needed: | | | |
| Signature: <i>Phil Xu</i> | | Date: <i>9/20/06</i> | |

Send to:
 ✓ Theresa Christian
 State Highway Administration
 707 N. Calvert Street
 Mail Stop C-301
 Baltimore, MD 21202
 Or fax to: 410-209-5004

ALTERNATIVES RETAINED FOR DETAILED STUDY

| | |
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| Project Name & Limits: MD 295 Project Planning Study MD 295: From MD 100 to I-195 and Henover Road from High Tech Drive in Howard County to MD 170 Anne Arundel County | |
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| <input type="checkbox"/> MD Dept. of Natural Resources <input type="checkbox"/> MD Dept. of the Environment | <input type="checkbox"/> MD Dept. of Transportation <input type="checkbox"/> MD Dept. of General Services |
| <input type="checkbox"/> Concurs (without comments) <input type="checkbox"/> Concurs (w/ minor comments) <input type="checkbox"/> Does Not Concur | |
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| <input type="checkbox"/> Provides Comments (below or attached) <input checked="" type="checkbox"/> Has No Comments | |
| Comments: | |
| Additional Information Needed: | |
| Signature: <u>Regina Hsu</u> | Date: <u>9/20/06</u> |

Sent to:
 Theresa Christian
 State Highway Administration
 707 N. Calvert Street
 Mail Stop C-301
 Baltimore, MD 21202
 Or fax to: 410-209-5004

ALTERNATIVES RETAINED FOR DETAILED STUDY

Project Name & Limits: MD 295 Project Planning Study
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☐ Environmental Protection Agency
☐ Corps of Engineers

☐ Fish and Wildlife Service
☐ National Park Service
☐ National Marine Fisheries Service

☒ MD Dept. of Natural Resources
☐ MD Dept. of the Environment

☐ Concurs (without comments) ☒ Concurs (w/ minor comments) ☐ Does Not Concur

Comments / Reasons for Non-Concurrence:

Note: Do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.

☐ MD Historical Trust ☐ MD Department of Planning ☐ Metropolitan Planning Organization

Comments:


Additional Information Needed:

Signature: Ray C. Dittman Date: 11-9-06

Send to:

Theresa Christian
State Highway Administration
707 N. Calvert Street
Mail Stop C-301
Baltimore, MD 21202

Or fax to: 410-209-5004



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

November 9, 2006

Mr. Joseph Kresslein
State Highway Administration
P.O. Box 717
Baltimore, Maryland 21203-0717

Dear Mr. Kresslein:

This letter is in response to the State Highway Administration request for Maryland Department of Natural Resources' (DNR) concurrence on the Alternatives Retained for Detailed Study (ARDS) package for the MD 295 Baltimore Washington Parkway Project, from MD 100 to I-195 and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County, Project No. AA372A11, Anne Arundel and Howard Counties.

Department staff participated in discussions of this project at the monthly Interagency Meetings and has reviewed past documentation on the project. The Department concurs with the Alternates Retained for Detailed Study package for the project, dated August, 2006, with the following comments:

As addressed in the ARDS document, the project area includes public lands owned and managed by the Department. The review of potential use of such State lands for transportation projects is carried out in a Department process separate from our NEPA related environmental review process. Please stay in contact and coordinate with our Public Lands Policy and Planning unit regarding the DNR lands within the study area. Arnold Norden can be contacted regarding this issue at 410-260-8406. It is our understanding that the statements currently made in the ARDS package regarding DNR lands are a result of past coordination with our Public Lands staff and are based on information they have provided directly to the study team.

Pages 15 and 16 of the document summarize the natural resources found in the vicinity of the project. The Department encourages and supports continued efforts during further planning to avoid and minimize impacts to natural resources in the project area, and to maximize the natural resource functions and values of any compensatory mitigation projects that may be associated with this project during later planning. The Department specifically encourages and supports the commitment made on page 16 of the document to conduct a field habitat assessment soon to determine the presence of several State listed species within the project area, and to coordinate further with the resource agencies on potential impacts to the Federally listed swamp pink.

If you have any questions concerning these comments you may contact Greg Golden of my staff at 410-260-8334.

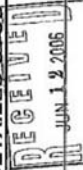
Sincerely,

Ray C. Dittman
Ray C. Dittman, Jr., Director
Environmental Review Unit
Tel: 410-260-8334

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ALTERNATIVES RETAINED FOR DETAILED STUDY



Project Name & Limits: MD 295 Project Planning Study
 MD 295: From MD 100 to I-195 and,
 Harover Road from High Tech Drive in Howard County to MD 178 in Frederick County

Having reviewed the attached Alternatives Retained for Detailed Study concurrence/comment package and the summary presented above, the following agency (by signing this document):

| | | |
|--|--|--|
| <input type="checkbox"/> Federal Highway Administration <input type="checkbox"/> Environmental Protection Agency <input type="checkbox"/> Corps of Engineers | <input type="checkbox"/> Fish and Wildlife Service <input type="checkbox"/> National Park Service <input type="checkbox"/> National Marine Fisheries Service | <input type="checkbox"/> MD Dept. of Natural Resources <input type="checkbox"/> MD Dept. of the Environment |
|--|--|--|

☐ Concurs (without comments)
 ☐ Concurs (w/ minor comments)
 ☐ Does Not Concur

Comments / Reasons for Non-Concurrence:

Note: Do not provide "conditional" concurrence. You should either concur with the information as provided (without comments or with minor comments) or not concur until revisions are made or additional information is provided.

☒ MD Historical Trust
 ☐ MD Department of Planning
 ☐ Metropolitan Planning Organization

☐ Provides Comments (below or attached)
 ☒ Has No Comments

Comments:

Additional Information Needed:

Signature: Ann Tarkenton Date: 8/4/06

F-157

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

January 25, 2005

Ms. Cynthia D. Simpson
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
P.O. Box 717
Baltimore, MD 21203-0717
ATTN: Mr. Donald Sparklin

RE: Project No. SP053448, MD 295; From MD 100 to I-195, and Hanover Rd. from
Railroad Tracks in Howard County to MD 170, Anne Arundel County, MD

Dear Ms. Simpson:

This responds to your letter, received November 22, 2004, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The federally threatened swamp pink (*Helonias bullata*) has been documented to occur in the vicinity of the project area. Swamp pink is a perennial wildflower that inhabits a variety of freshwater wetlands, including spring seepages, swamps, bogs, wet meadows and margins of small streams. We recommend that any wetlands to be filled or otherwise affected by the proposed project be surveyed for the presence of swamp pink by a professional botanist. Enclosed is a list of qualified individuals who have experience with swamp pink surveys. Should any swamp pink be found on the project site potential impacts on swamp pink habitat should be analyzed as a part of your environmental assessment. If impacts may occur, further section 7 consultation with the U.S. Fish and Wildlife Service may be required.

Except for occasional transient individuals, no other federally proposed or listed endangered or threatened species are known to exist within the project impact area. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened and endangered species under our jurisdiction. For information on the presence of other rare species, the Maryland Wildlife and Heritage Division should be contacted.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Andy Moser at (410) 573-4537.

Sincerely,

C. A. Moser

Mary J. Ratnaswamy, Ph.D.
Program Supervisor, Threatened and Endangered Species

Enclosure

cc: Glenn Therres, Maryland Wildlife and Heritage Division, Annapolis, MD

| | |
|---|--|
| <p style="text-align: center;">SURVEY CONTACTS FOR THE SWAMP PINK (<i>Helonias bullata</i>)</p> | |
| <p>D. Daniel Boone 8111 Chestnut Avenue Bowie, MD 20715 301-464-5199</p> | <p>Phil Sheridan Botanist 2500 1/2 Kensington Avenue Richmond, VA 23220 804-359-6439</p> |
| <p>David Maddox The Nature Conservancy Science Division 1815 North Lynn Street Arlington, VA 22209 703-841-5383</p> | <p>Garrie D. Rouse Rouse Environmental Services, Inc. Route 1, Box 25 Alett, VA 23009 804-769-0846</p> |
| <p>Jan Reese Environmental Regulations Consultant P.O. Box 298 St. Michaels, MD 21663</p> | <p>Ted Bradley George Mason University Department of Biology Fairfax, VA 22030-4444 703-993-1050</p> |
| <p>Dr. Donna Ware Department of Biology The College of William and Mary Williamsburg, VA 23187 757-221-2213</p> | <p>Catherine Tueker 302 Danray Drive Richmond, VA 23228 (H) 804-264-6941 (W) 804-786-0450</p> |
| <p>Mark Strong Smithsonian Institution Washington, DC 202-357-4570</p> | |
| <p>Inclusion of names on this list does not constitute endorsement by the U.S. Fish and Wildlife Service or any other U.S. Government agency.</p> | |
| <p style="text-align: right;">JANUARY 23, 1998</p> | |



Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
C. Ronald Franks, Secretary

March 31, 2005

Ms. Cynthia D. Simpson
Maryland Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

RE: Environmental Review for Project No. SP053A48, MD 295: from MD 100 to I-95
and Hanover Road from Railroad Tracks in Howard County to MD 170, Anne
Arundel County, Maryland.

Dear Ms. Simpson:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted.

We would also like to bring to your attention that Wildlife and Heritage Service's Natural Heritage database does indicate that the following plant species are known to occur within the vicinity of the project site:

| Scientific Name | Common Name | State Status |
|-------------------------------|-------------|---------------------------------------|
| <i>Helianthus bullata</i> | Swamp Pink | Endangered, also Federally Threatened |
| <i>Arundinaria gigantea</i> | Giant Cane | Rare |
| <i>Polypodium virginianum</i> | Clannysweed | Endangered |
| <i>Thelypteris simulata</i> | Bog Fern | Threatened |
| <i>Juglans cinerea</i> | Butternut | Rare |

These species could potentially occur on the project site itself, if the appropriate habitat is present. Swamp Pink is a perennial wildflower that could potentially occur on the site in areas of appropriate nontidal wetland habitat, including forested wet depressions, spring seeps, bogs, wet meadows and margins of small streams. Habitat for Giant Cane is described as: Bogs, low woods, savannas, and dry woods (Radford et al 1968).

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Page 2
March 31, 2005

Habitat for Clannysweed is described as: Dry sandy or gravelly soil, especially along streams (Gleason & Cronquist 1963); dry, open, sandy or gravelly ground of waterside banks (Hough 1983); sand spits, gravel along railroad tracks (MDNHP). Habitat for Bog Fern is described as: Bogs or swampy woods and thickets or on knolls in bogs (Fernald 1950); swamps and moist woods, in acid soil (Gleason & Cronquist 1991). Habitat for Butternut is described as: Rich woods and river terraces (Fernald 1950).

If the appropriate habitat for any of the above state-listed species is found to occur within this project's limits-of-disturbance then we may request surveys for those species be conducted during the appropriate time of year when the species is most identifiable, and following our rare plant survey protocol. Though not required, we would also encourage you to consider the above species that are not state-listed when surveys are conducted.

With the exception of the Butternut record, the above-mentioned species are associated with Stony Run, which is designated in state regulations as a Nontidal Wetland of Special State Concern (NTWSSCC) and regulated by Maryland Department of the Environment. This wetland and the adjacent 100' upland buffer is regulated as a NTWSSCC. Your project may need to be reviewed by Maryland Department of the Environment for any necessary wetland permits associated with the NTWSSCC.

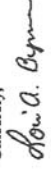
Our analysis of the information provided also suggests that the forested area on or adjacent to the project site contains Forest Interior Dwelling Bird habitat. Populations of many Forest Interior Dwelling Bird Species (FIDS) are declining in Maryland and throughout the eastern United States. The conservation of FIDS habitat is strongly encouraged by the Department of Natural Resources. The following guidelines will help minimize the project's impacts on FIDS and other native forest plants and wildlife:

1. Avoid placement of new roads or related construction in the forest interior. If forest loss or disturbance is absolutely unavoidable, restrict development to the perimeter of the forest (i.e., within 300 feet of the existing forest edge), and avoid road placement in areas of high quality FIDS habitat (e.g., old-growth forest). Maximize the amount of remaining contiguous forested habitat.
2. Do not remove or disturb forest habitat during May-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.
3. Maintain forest habitat as close as possible to the road, and maintain canopy closure where possible.
4. Maintain grass height at least 10" during the breeding season (May-August).

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Page 3
March 31, 2005

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,


Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2004.2597.aa
Cc: K. McCarthy, WHS
R. Dintaman, ERU
M. Rathaswamy, USFWS

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Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Eric Schweeb, Deputy Secretary

July 9, 2007

Ms. Theresa Christian
Environmental Manager, Project Planning Division
Maryland State Highway Administration
707 N. Calvert St., C-301
Baltimore, MD 21202

RE: MD 295/Hanover Road Improvements and Potential Impacts to State Threatened Plant Species

Dear Ms. Christian:

Thank you for submitting the report regarding the rare species survey work done for this project. The report thoroughly documents the inventory work and the results, with good documentation of the state threatened plant, Bog fern (*Thelypteris simulata*), that was observed within the proposed limits of disturbance. Based upon the mapping you provided, it appears that the proposed widening of Stoney Run Road may result in a take of this state threatened plant as it is currently designed. The Maryland Threatened and Endangered Species Regulations prohibit the take of a state threatened plant species from state property except by special permit from DNR. This permit may be issued only for scientific research designed to enhance the recovery of the species or population (COMAR 08.03.08.02.B). It would be very helpful to have the locations of the Bog fern flagged and then formally surveyed (by this I mean the linear and angular measurements kind of survey) and mapped relative to the proposed limits of disturbance so that we can work together to pursue a design that avoids direct take of plants. This work would need to take place before mid-September, when the plants begin to senesce and are difficult to identify.

In addition to the potential for direct take of plants, sedimentation from the proposed construction activity and stormwater runoff from the new impervious surface area have the potential to degrade the habitat that supports bog fern at the Stoney Run crossing. In order to maintain the water quality and hydrology in the bog fern's wetland habitat, the Natural Heritage Program has the following recommendations:

1. Minimize clearing and tighten the limits of disturbance through the wetlands bordering Stoney Run to the greatest extent possible.
2. Stabilize soil immediately (within 24 hours). Special effort should be made to retain fine particle silt, sand and clay sediments including the incorporation of redundant/additional control measures in the sediment and erosion control plan to ensure maximum filtration of any sediment-laden runoff (e.g., accelerated stabilization as noted above, use of super silt fence instead of silt fence, etc.)
3. Inspect frequently - All measures should be inspected daily to ensure that they are functional from the very initial stages through final construction, and any problems should be corrected immediately (within 24 hours).

cc: Mr. L. B. B. B.

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4. Use bioretention to manage stormwater runoff with the goal to mimic natural infiltration patterns across the site in order to maintain natural hydrology.

Please note that the wetlands bordering Stoney Run have been identified as wetlands of special state concern by the Maryland Department of the Environment, and that a 100 ft upland buffer is regulated.


Along with the mapping of the Bog fern stands relative to the proposed limits of disturbance, it would be helpful if you could provide a written description of the proposed work that would directly impact the wetlands along Stoney Run. Thank you for your assistance in coordinating the review of this project. If you have any questions, please feel free to contact me (410/260-8569).

Sincerely,

Katharine McCarthy
Natural Heritage Program
Wildlife and Heritage Service

Cc: Lori Byrne, DNR
Judy Cole, MDE

06-08-2006 11:23 FROM:SH4 PFO 410 205 5004 TD:6410060956 P:2/5



MARYLAND

DEPARTMENT OF

NATURAL RESOURCES

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
C. Ronald Franks, Secretary

November 16, 2005

Mr. Bruce Grey
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Re: MD 295/Hanover Road Study


Dear Mr. Grey:

As indicated in your letter of October 27, a portion of Patuxent Valley State Park is within the study area for this project. I have enclosed a copy of the approved Park Master Plan and offer the following response to the questions posed in your letter.

- The Manager of Patuxent Valley State Park is Gary Burnett. However, I will be the point of contact for coordination purposes. I can be reached at (410) 260-8406.
- Much of Patuxent Valley State Park was acquired or developed with money from the Land and Water Conservation Fund, and the entire park is considered federalized by the US Department of the Interior for section 4(f) purposes.
- Patuxent Valley State Park is a recreational resource of Regional Importance. Facilities include a full range of day use and camping opportunities, including a variety of trails (hiking, biking, equestrian, nature), pavilions, multipurpose fields, interpretive exhibits, etc. These facilities are used on a daily basis by numerous visitors.

The portion of the park within your project area is undeveloped and provides only very limited passive recreational uses, natural habitat and watershed benefits. If you require additional information please don't hesitate to let me know.

Sincerely,



Arnold Norden
Central Region Planner

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MD 295 Project Planning Study

29

Environmental Assessment

June 28, 2005

Mr. Bruce M. Grey
Deputy Director
Office of Planning & Preliminary Engineering
Maryland State Highway Administration
707 North Calvert Street
Baltimore MD 21202

RE: Project No. AA372B11
MD 295; From MD 100 to I-195 and Hanover Road from Coca Cola Drive in Howard County to MD 170 in Anne Arundel County

Dear Mr. Gurney:

As indicated in your letter of June 27, 2005, the principal park facilities in the identified project study area are Pappas Valley State Park, administered by the Maryland Department of Natural Resources, and the BWI Trail, administered by the Anne Arundel County Department of Recreation and Parks. I will be responding to your information request for the BWI Trail only, as follows:

- **Office:** with Jan-adection;
- **Dennis Callahan**
Director of Recreation and Parks
- **See enclosed Planning plan.** Also shown on ADC Anne Arundel County, MD Street Map Book, Map 1.
- **Funding Source:**
Transportation Enhancement Fund
- **Types of Facilities:**
Paved 10' wide multi-use trail, bridges and boardwalks, benches, children's playground, connections to the BWI rail station, light rail stations, Anne Arundel County parks, Annapolis Senior Center, and Linsdale Middle School.
- **Frequency of Public Use:**
Daily, year-round
- **Primary Use:**
Recreation, with strong transportation component
- **Park Master Plan:**
Planning Plan enclosed. Phase 7 of the plan identifies the proposed connection between the main circuit trail and Patuxent Valley State Park.
- **Determination of Significant Functions:**
The BWI Trail has a very significant function in Anne Arundel County's recreation and parks facilities. It is the only

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multi-use trail in the northwestern segment of Anne Arundel County. It forms a link in an interconnected trail system throughout Anne Arundel County, and is a component of the national East Coast Greenway trail. In addition, with its links to BWI Airport, Annapolis, MARC and lighttrail, it performs a significant transportation function as well.

- **Additional Note:**

On the enclosed Planning Plan (Master Plan), the connection to Paupoe Valley State Park is shown extending north from Stony Run Road up the valley of Stony Run to the Patapasco River and State Park. Because of the impacts on wetland of Critical State Concern, steep slopes and sensitive species, an alternate alignment west from Stony Run Road to Hanover Road, extending west to Race Road in Howard County, has been identified as more feasible. A Class 2 or Class 1 trail along Race Road to Ellikridge and the State Park is very feasible from that point.

Should you have any questions, I may be contacted at 410-222-7317 x3528.

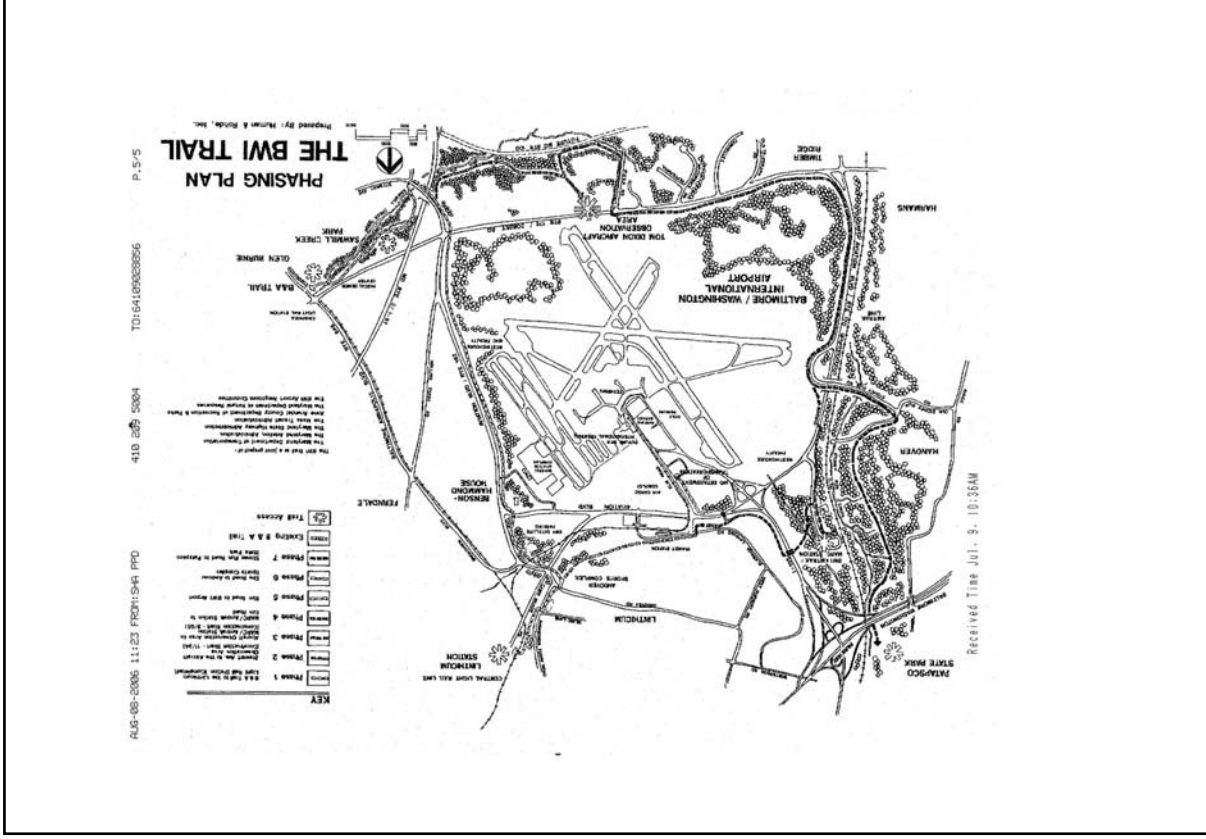
Sincerely,

~~John T. Keene, Chief~~
Planning & Construction

TK-Aves

cc: Tom Donlin
Theresa Christman, SHA

Received Time Int. 9. 10:35AM





Martin O'Malley, Governor | Anthony G. Brown, Lt. Governor | John D. Poyser, Secretary | Neil J. Pedersen, Administrator

Maryland Department of Transportation

May 29, 2007

Re: Project No. AA372A11

MD 295: from MD 100 to I-195 and, Hanover Road: from High Tech Drive, Howard County to MD 170 Anne Arundel County, MD

Mr. Arnold Norden, Chief,
Central Region Planning
Department of Natural Resources
Resource Planning Program
Tawes State Office Building, E-4
580 Taylor Ave
Annapolis, MD 21401

Dear Mr. Norden:

Thank you for meeting with the project team on April 10 to discuss the MD 295/Hanover Road project. The purpose of this project is to improve the existing roadway capacity, traffic operations, and safety of MD 295. The MD 295 project will enhance Hanover Road as a secondary access to BWI and the surrounding areas, will improve the MD 295 and Hanover Road connectivity between the Baltimore and Washington Metropolitan Regions as it relates to BWI, and will serve to support existing and planned economic development in and around the airport and airport business district.

The purpose of this letter is to request your input on the Alternatives Retained for Detailed Study (ARDS), discussed below and shown in the attached figures, as they pertain to the potential impacts to the Patapsco Valley State Park, which is owned and maintained by the Maryland Department of Natural Resources (DNR). The park extends along 32 miles of the Patapsco River and its tributaries and encompasses approximately 14,000 acres of land and five developed recreational areas. Within the MD 295 project area, the Patapsco Valley State Park consists of undeveloped forested areas. No recreational amenities (trails, etc.) are located in this section of the park.

All of the build alternatives include widening MD 295 from a four-lane roadway (two through lanes in each direction) to a six-lane roadway (three through lanes in each direction) with access improvements to and from Hanover Road. The additional width would include a twelve-foot travel lane with a ten-foot shoulder constructed within the median of MD 295 in each direction, from south of the MD 100 interchange to north of the I-195 interchange. The northern limit of the MD 295 widening would tie into another MD 295 project, from I-195 to just south of I-695, which is currently moving forward in the design phase of the project development process.

My telephone number/toll-free number is
Maryland Relay Service for Impaired Hearing or Speech: 1.800.735.2258 Statewide Toll Free
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone: 410.479.0770 • www.marylandroads.com

Mr. Arnold Norden
MD 295/Hanover Road
Page Two

The following alternatives have been retained for detailed study and will be presented at an upcoming Public Hearing currently scheduled for this fall:

Alternative 1 – No Build

Alternative 1 includes no major improvements to the existing roadway. Improvements would occur as part of the routine maintenance and safety improvements determined for the project area.

Alternative 3 – Compressed Diamond Interchange

Alternative 3 consists of a compressed diamond interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at a signalized intersection on either side of MD 295. With this alternative, Hanover Road to the west of MD 295 would be improved along its current alignment.

Alternative 3A – Compressed Diamond Interchange Hanover Road South

Alternative 3A relocates Hanover Road to the south of the existing Hanover Road on the east side of MD 295 with the same interchange configuration (a compressed diamond) as Alternative 3. With this alternative, Hanover Road to the west of MD 295 would be improved along a new alignment.

Alternative 4 – Single Point Urban Interchange (SPUI)

Alternative 4 proposes a SPUI at MD 295 and Hanover Road. While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below or underneath the bridge, allowing opposing left turning movements to occur simultaneously. The advantage of the SPUI Alternative is due to the configuration of the ramps, a major source of traffic conflict is eliminated, increasing overall intersection efficiency and capacity. With this alternative, Hanover Road to the west MD 295 would be improved along its current alignment.

Alternative 4A – SPUI Hanover Road South

Alternative 4A relocates Hanover Road to the south of the existing Hanover Road on the east side of MD 295 with the same interchange configuration (a SPUI) as Alternative 4. With this alternative, Hanover Road to the west of MD 295 would be improved along a new alignment.

Alternative 7 – South Alignment of Hanover Road with Loop and Half Diamond Interchange

Alternative 7 was developed in an effort to minimize impacts to the Patapsco Valley State Park, wetlands, and residential areas. This alternative provides no ramps on the northwestern quadrant of the interchange. A loop ramp is proposed in the southwest quadrant, and a one-way directional ramp is being proposed in both the northeast and southeast quadrants. This alternative will require relatively large areas of right-of-way when compared to the Compressed Diamond or SPUI Interchanges.

Mr. Arnold Norden
MD 295/Hanover Road
Page Three

Alternative 8 – Diverging Diamond Interchange
Alternative 8 Proposes to switch traffic at the ramp terminals over to the opposite side of the roadway within the interchange. This promotes left-turn movements and eliminates the left-turn signal phase, improving the interchange's efficiency. This traffic pattern improves capacity and minimizes the length of the queues that can normally cause failure within a diamond interchange.

Potential Park Impacts

Patapsco Valley State Park – All of the build alternatives would require right-of-way acquisition within the park boundary. As shown in Table 1, the impacts of all of the build alternatives are similar, with Alternative 7 having the least impact to the park, and Alternative 4 having the greatest impact.

| Table 1. Park Impacts per Alternative | |
|---------------------------------------|-----------------------|
| Alternative | Park Acreage Impacted |
| Alternative 3 | 2.97 acres |
| Alternative 3A | 2.86 acres |
| Alternative 4 | 3.23 acres |
| Alternative 4A | 2.90 acres |
| Alternative 7 | 2.85 acres |
| Alternative 8 | 2.97 acres |

The majority of park impacts for each alternative occur in the northwest quadrant of the MD 295 crossing of Hanover Road. Within this quadrant, small areas of forested land within the park boundary would be impacted by the proposed interchange. Additionally, the improvements to Hanover Road would require replacing the existing bridge that carries Deep Run beneath the roadway, would impact the park (forested areas, wetlands, floodplains), and would result in two residential displacements.

The project team has analyzed park avoidance and minimization options for this project. A minimization option that was investigated would reduce the number of proposed lanes on Hanover Road to two sixteen-foot bicycle compatible lanes rather than the four-lane divided roadway proposed with other built alternatives, and would include a five-foot sidewalk on one side of the roadway, and a ten-foot hiker-biker trail on the other side. The minimization option impacts 2.08 acres of the park, 0.77 acre less than Alternative 7 which is the alternative that requires the least park acreage. An avoidance option developed would terminate all improvements prior to reaching the park boundary

Mr. Arnold Norden
MD 295/Hanover Road
Page Four

by transitioning the proposed four-lane improvements to Hanover Road into the existing two-lane section between the park and the proposed interchange at MD 295. The proposed interchange is within 1,100 feet of the park boundary. The four lane section is needed to provide adequate capacity for traffic exiting from the interchange onto Hanover Road. The park avoidance option also proposes a loop ramp similar to Alternate 7.

While the minimization and avoidance options are feasible, they do not fully address the project's purpose and need. The minimization and avoidance options will not provide the increased capacity needed to accommodate the proposed increase in residential and commercial traffic in Howard County that would be seeking access to the new Hanover Road interchange with MD 295. Both Howard and Anne Arundel Counties would like Hanover Road improved to four lanes to serve as a secondary emergency roadway, as well as provide a secondary access to BWL. In addition, the avoidance option would not correct existing substandard deficiencies on existing Hanover Road which include flooding during heavy rains and lack of sidewalks which is inconsistent with the Americans with Disabilities Act (ADA) standards. We feel that the avoidance option would result in unsafe conditions if improvements on Hanover Road were discontinued prior to reaching the park boundaries.

As we mentioned at the April 10th meeting, it is SHA's intention to mitigate impacts to the park and we request your input on strategies that we might pursue. Since the proposed roadway improvements would utilize undeveloped portions of the park which provide very limited passive recreational uses, natural habitat and watershed benefits, we believe that the proposed MD 295/Hanover Road improvements would not adversely affect attributes of the park that qualify it for protection under Section 4(f). In addition, it has been determined that Section 6(f) funds were not used to purchase the park lands within the project area.

Pending your agreement in writing, as the official with jurisdiction over Patapsco Valley State Park, that the proposed impacts would not adversely affect the activities, features, and attributes of the park protected under Section 4(f) of the US DOT Act, we believe that these impacts would qualify for a De Minimis finding under Section 4(f) and intend to seek FHWA's concurrence in this determination.

Mr. Arnold Norden
MD 295/Hanover Road
Page Five

Please provide your comments to this letter by June 25th. Should you have any questions or need additional information, please feel free to contact Ms. Theresa Christian, Environmental Manager, at 410-545-8697, or Ms. Carmelitta Harris, Project Manager, at 410-545-4522 (toll free at 800-548-5026).

Very truly yours,


Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering


Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

Attachment

cc: Ms. Theresa Christian, Environmental Manager, Project Planning Division, SHA
Mr. Bruce M. Grey, Deputy Director Office of Planning and Preliminary Engineering, SHA

Ms. Ann Gutierrez, Natural Resource Planner, Maryland Department of Natural Resources
Ms. Carmelitta Harris, Project Manager, Project Planning Division, SHA
Mr. Joseph R. Kresslein, Assistant Division Chief, Project Planning Division, SHA
Ms. Robin Melton, Park Manager, Patapsco Valley State Park



July 10, 2007

Bruce M. Grey
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Re: SHA Project No. AA372A11; DNR Project Review No. 2007-DNR-119 – Hanover Road Project

Dear Mr. Grey:

The Maryland Department of Natural Resources (DNR) has completed the project review of the preliminary plans you submitted for the above project. All projects on or potentially affecting DNR public lands are evaluated for impacts through this review process; involving various pertinent program areas within DNR.

In general, DNR is supportive of the project however; upon review of the proposed options, DNR has the following concerns:

- Currently the Patapsco Valley State Park Bike Trail runs from the BWI Trail to Stony Run Rd. to Hanover Rd. and then on to Race Rd and then through Elkridge to the Avalon Area of the park. This is part of the Patapsco Heritage Greenway Trail, an on /off road trail connecting Ellicott City/Catonsville to the BWI Trail. These are primarily two lane roads now, without heavy traffic. Widening Hanover Rd will have impact on safety for bicyclists who follow this route. This bike route carries significant bike traffic.
- The Park Avoidance option, which was not provided for review, will not solve the recreational concerns stated above.
- However, the addition of a hiker/biker path, depending how it is added may add a level of safety in this area.

The Minimization Option was not provided for review but was described in the attached letter as including an off road bike/hiker trail and bike lanes. Because our interest is to choose the option that least affects the park and accommodates recreational uses of the area, DNR requests that the Minimization Option be provided for our review. Once received, DNR will expedite the review of the Minimization Option.

Additionally, SHA should be aware that the Anne Arundel County Department of Public Works currently holds a permanent utility easement (+/- 0.102 ac) and temporary construction easement (+/- 0.418 ac) through park land immediately south of Hanover Road at the Deep Run Bridge. Part of the


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Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John B. Griffin, Secretary
Eric Schwab, Deputy Secretary

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agreements recommended that Anne Arundel County Department of Public Works coordinate with SHA to ensure that a 200-foot corridor runs through the area in order to accommodate the planned Hanover Rd/295 interchange. I assume this coordination has taken place.

Should you have any questions, please feel free to contact me, the Natural Resource Planner coordinating review, at 410-260-8418.

Sincerely,

 Ann Gutierrez Carlson
 Associate Natural Resource Planner
 Public Lands Policy and Planning
agcarlson@dnr.state.md.us

cc: Ms. Theresa Christian, Environmental Manager, Project Planning Division, SHA
 Mr. Arnold Norden, Central Region Planning Chief, DNR



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor

Maryland Department of Transportation

August 27, 2007

Re: Project No. AA372A11
MD 295: from MD 100 to I-195 and,
Hanover Road: from High Tech Drive,
Howard County to MD 170,
Anne Arundel County, MD

Ms. Ann Gutierrez Carlson
Natural Resource Planner
Maryland Department of Natural Resources
Tawes State Office Building
580 Taylor Avenue, E4
Annapolis, MD 21401

Dear Ms. Carlson:

Thank you for your letter dated July 10, 2007 regarding the MD 295 Project Planning Study. This letter is in response to your comments, specifically your comments regarding bicycle and pedestrian connectivity along Hanover Road between the Baltimore/Washington International Thurgood Marshall Airport (BWI) Trail and the Patapsco Valley State Park.

Both on- and off-road bicyclists would be accommodated along Hanover Road under all of the proposed build alternatives. The proposed typical section of Hanover Road includes sixteen-foot outside lanes to accommodate on-road bicyclists (Attachment 1). The wider lanes would be striped to delineate the bicycle lane, creating a safer environment for bicyclists. Hanover Road would also include a ten-foot hiker-biker trail on the north side as well as a five-foot sidewalk on the south side. We believe that these elements would make a safer and better connection between the BWI Trail and the Patapsco Valley State Park.

As part of the Section 4(f) process, the project team analyzed park avoidance and minimization options. In addition to the No-Build Alternative, two park avoidance options were considered. One option would route traffic through the MD 100 interchange instead of widening Hanover Road through the Patapsco Valley State Park. The other option included the construction of a new interchange, with improvements to Hanover Road restricted to the area east of the park boundaries (Attachment 2).

Although these avoidance options are feasible, they are not considered prudent because they would not fully address the purpose and need for the project. They would not provide capacity in support of anticipated increases in residential and commercial traffic in Howard and

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Ms. Ann Carlson
Project No. AA372A11 – MD 295 Hanover Road
Page 2

Anne Arundel Counties, an element of the purpose and need. Both Howard and Anne Arundel Counties would like Hanover Road improved to four lanes to serve as a secondary emergency roadway and to provide secondary access to BWI. Moreover, based on the existing level of congestion and near-failing conditions at the MD 100/MD 295 interchange, it is projected that the unimproved western portion of Hanover Road would continue to carry the majority of local traffic seeking access to the new interchange. In addition to not fully addressing the purpose and need, the avoidance options would not correct the existing substandard deficiencies on Hanover Road which include flooding during heavy rains and lack of sidewalks, which is inconsistent with the Americans with Disabilities Act (ADA) standards. Furthermore, as mentioned in your letter, this option would not solve the recreational concerns.

A minimization option would involve reducing the typical section of Hanover Road to two bicycle compatible lanes without a median, a ten-foot hiker biker trail on the north side, and a five-foot sidewalk on the south side (Attachments 3 and 4). This option would reduce the impacts to the Patapsco Valley State Park to 2.08 acres. While this minimization option would correct the existing substandard deficiencies on Hanover Road, it would not provide the four lanes that both Howard and Anne Arundel counties desire. Furthermore, reduction of the typical section would require Hanover Road to be closed for long periods of time during construction, whereas the alternatives retained for detailed study would not require closure. Long periods of complete closure would be undesirable because Hanover Road is used by Anne Arundel and Howard County emergency service providers.

The MD 295 Project Team has coordinated with both Howard and Anne Arundel counties throughout the project and is aware of the existing utilities in the area. Hanover Road will be widened to the north of the existing roadway due to the location of an existing utility easement that runs along the south side of Hanover Road.

We hope that this letter addresses your concerns. We will continue our coordination throughout the development of this project and welcome any input you may have. Should you have any questions or need additional information, please feel free to contact Ms. Theresa Christian, the Environmental Manager, at 410-545-8697, or Ms. Carmele Harris, Project Manager, at 410-545-8522.

Very truly yours,


Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by
Joseph R. Kreslein
Assistant Division Chief
Project Planning Division

Ms. Ann Carlson
Project No. AA372A11 – MD 295 Hanover Road
Page 3

Attachments

cc: Mr. Dennis Atkins, SHA-PPD
Ms. Theresa Christian, SHA-PPD
Mr. Bruce Grey, SHA-PPD
Ms. Carmelella Harris, SHA-PPD
Mr. Joseph Kresslein, SHA-PPD



Maryland Department of Transportation
June 29, 2007

Re: Project No. AA372A11
MD 295: from MD 100 to I-195 and,
Hanover Road: from High Tech Drive,
Howard County to MD 170
Anne Arundel County, MD

Mr. Frank Marzucco, Director
Anne Arundel County Recreation and Parks
1 Harry S. Truman Parkway
Annapolis, MD 21401

Dear Mr. Marzucco:

The Maryland State Highway Administration is proposing improvements along MD 295 from MD 100 to I-195 and along Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County. The purpose of the project is to ease congestion, improve existing capacity, traffic operations, and safety in the project area. Currently, I-195 serves as the primary access to the Baltimore Washington International Thurgood Marshall Airport (BWI) and BWI area services. The purpose of this project is also to enhance Hanover Road as a secondary access to BWI and the surrounding areas. By improving MD 295 and Hanover Road, the project will improve connectivity between the Baltimore and Washington Metropolitan Regions as it relates to BWI and will support existing and planned economic development in and around BWI.

The improvements proposed to the intersection of Stoney Run Road at the southern entrance to Northrop Grumman (see attached map) would involve relocation of a portion of (or portions of) the BWI Trail currently under your jurisdiction. The BWI Trail would be relocated between the eastern end of the Stoney Run Road bridge over MD 170 to the Northrop Grumman entrance for a length of approximately 400 feet. The relocated trail would be constructed first in order to avoid interruptions to the activities or purposes of the trail.

Our office requests your formal concurrence that the proposed temporary construction impact is consistent with the designated use of the trail and that the following four elements are applicable.

- 1) The duration of the use will be temporary and less than the time needed for construction of the project, and the nature and magnitude of the changes to the trail will be minor.
- 2) The activity will not result in a change in ownership of the trail or result in the retention of long-term or indefinite interests in this property for transportation purposes.

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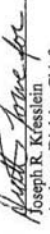
Mr. Frank Marzucco
MD 295/Hanover Road
Page Two


- 3) The improvements will not result in any temporary or permanent adverse impacts nor will there be interference with the activities or features which are important to the purpose or function that qualifies the trail for protection under Section 4(f) of the US DOT Act on either a temporary or permanent basis.
- 4) The land being used will be fully restored, in that the resource will be returned to a condition that is at least as good as that which existed prior to the project.

If you agree with the determinations cited above, please indicate your concurrence on the signature line below. Should you have any questions, please contact Ms. Theresa Christian, the Environmental Manager for the project. Ms. Christian can be reached at 410-545-8697.

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by: 
Joseph R. Kresslein
Assistant Division Chief
Project Planning Division


Director, Anne Arundel County
Recreation and Parks

7-5-2007
Date

Attachment
cc: Mr. Dennis Atkins, Assistant Division Chief, Project Planning Division, SHA
Ms. Theresa Christian, Environmental Manager, Project Planning Division, SHA
Mr. Bruce M. Grey, Deputy Director Office of Planning and Preliminary Engineering, SHA
Ms. Carmelita Harris, Project Manager, Project Planning Division, SHA
Mr. Jack Keene, Chief, Planning & Construction, Anne Arundel County Recreation and Parks
Mr. Joseph R. Kresslein, Assistant Division Chief, Project Planning Division, SHA

Alternate 6: *Alternate ramp from southbound MD 295 to Hanover Road.* This alternate avoids impacts on the northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized intersection on Hanover Road. Alternate 6 would also widen MD 295 and upgrade Hanover Road, as with the previous alternates.

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Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Three

Alternate 7: Relocated Hanover Road (North) with Loop Ramp

This alternate relocates Hanover Road to the south to eliminate curves on Hanover Road and to keep a continuous traffic movement along Hanover Road during construction. Alternate 7 avoids impacts to the northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized intersection on Hanover Road. Alternate 7 would also widen MD 295 and upgrade Hanover Road, as with the previous alternates.

Funding

Federal funds are anticipated for this project.

Area of Potential Effects

In determining the Area of Potential Effects (APE) for this project, SHA considered possible physical, visual, atmospheric, and audible impacts to historic properties. With the exception of Alternate 1, the above alternates would require additional right-of-way. Because the proposed improvements for MD 295 involve widening within the median, the APE includes the properties adjacent to MD 295 within the project limits. The APE also includes properties adjacent to the section of Hanover Road, where proposed improvements include widening the existing roadway from two to four lanes, as well as the area between Ridge Road and Stoney Run Road where a new roadway is proposed, and properties adjacent to Stoney Run Road between Old Stoney Run Road and MD 170 (Aviation Boulevard), as indicated on the attached SHA quadrangle map for Hanover (Attachment 3).

Identification Methods and Results

Potentially significant architectural and archaeological resources were both researched as part of the historic investigation instigated by the proposed project planning study.

Architecture: SHA Architectural Historian Melissa Hess consulted historic maps, county histories, the SHA-GIS Cultural Resources Database, and Maryland Inventory of Historic Properties (MIHP) forms, and conducted field visits on August 3, 2005, September 21, 2005, and October 21, 2005.

The APE is located primarily in northwest Anne Arundel County and extends into southeast Howard County. Though the existing landscape retains some evidence of an agricultural past, the APE is characterized by dispersed residential development, parkland, and large-scale modern commercial development.

In the eighteenth century, an iron industry emerged in the Patapsco River Valley, which continued into the second half of the nineteenth century. Evidence of this past industry remains in the area, such as the Elkridge Furnace Complex (HO-367), located approximately one mile

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Four

north of the APE. Martenet's 1860 Map of Anne Arundel County, Maryland shows the "Timber Neck Ore Mine" southwest of the confluence of Deep Run and Piney Run, which is in the vicinity of the southern portion of the APE.

Agriculture played a prominent role in the area's nineteenth century development. Patterns of land use were shaped by the establishment of family farmsteads and dispersed community resources, which were connected by rural roads. Mills and general stores served the surrounding farming community. Martenet's 1860 map shows an "Old Paper Mill" west of Deep Run and south of ancestral Hanover Road. The map also shows "Wilson's Store" adjacent to the tracks of the Baltimore and Washington Railroad (later the Baltimore and Ohio Railroad), just west of the APE. Other community resources in the area included the County School Number 52 and a Colored Methodist Episcopal Church, both located approximately one-half mile south of the APE.

The 1878 G.M. Hopkins' Atlas of Anne Arundel County also shows the iron ore mines at Deep Run and Piney Run. This atlas indicates that the vicinity of the present-day intersection of Hanover Road and Race Road was known as "Timber Neck." The Baltimore and Washington Railroad had become the Washington Branch of the Baltimore and Ohio Railroad. New tracks built by the Baltimore and Potomac Railroad Company appear on the 1878 map, running north-south along the east side of the APE. By this time, W. T. Dawson had established a store on the northeast corner of the intersection of ancestral Ridge Road and Stoney Run Road. On G.M. Hopkins' 1878 Atlas of Fifteen Miles Around Baltimore including Howard County, Maryland, the Great Falls Manufacturing Company occupies the location of the Old Paper Mill shown on Martenet's 1860 map.

In the early twentieth century, the area still retained the land use patterns of the nineteenth century. The USGS map for the Relay quadrangle for 1907 shows that several more structures had been constructed along Hanover Road and Stoney Run Road. In that year, Maryland established its first state park, the Patapsco State Forest Reserve, located along the banks of the Patapsco River. Over the course of the twentieth century, the park acquired additional parcels along the river and its tributaries. Today, a portion of parkland located along both sides of Deep Run crosses the APE.

At the mid twentieth century, the area experienced dramatic change with the introduction of two major projects, the Friendship International Airport and the Baltimore-Washington Expressway. Additionally, the nation-wide housing boom that followed World War II had some influence on the area, although there were no planned developments constructed in the vicinity of the APE. The 1947 USGS map for Relay shows additional houses on either side of Hanover Road, clustered around the Ridge Road and Stoney Run Road crossroads, and along Stoney Run Road.

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Five

In 1946, the Baltimore Aviation Commission selected a 3,200 acre site in the vicinity of Friendship Church in Anne Arundel County, ten miles south of Baltimore and 30 miles north of Washington D.C. as the site of a major new airport. In 1947, construction began on the Friendship International Airport and in June 24, 1950, President Harry S. Truman dedicated what was considered the most advanced airport in the country at the time. In 1972, the State of Maryland bought the airport, eventually renaming it the Baltimore-Washington International Airport (BWI). The airport is directly east of the APE and has been a major shaping factor in the recent development of the area.

While construction of the Friendship International Airport was underway, transportation officials planned for a major freeway between Baltimore and Washington D.C. to alleviate increasing traffic along the route. The new road was built in two sections, a federal portion, which is now the National Register listed Baltimore-Washington Parkway, covered the nineteen miles between Washington, D.C. and just below Jessup Road (MD 175), and a ten-mile Maryland-owned and operated portion, which is now MD 295. According to the National Register nomination for the Baltimore-Washington Parkway, the decision to break the route in to two sections was because the state could not single-handedly afford to build a new road and also because congress felt it unwise to give a state rights through federal property, which composes much of the parkway's right-of-way. By 1951, the Maryland State Roads Commission had completed the Maryland portion, while the federal portion remained under construction. The introduction of this limited access freeway divided some farmsteads, but kept roads such as Hanover Road and Ridge Road open to local traffic.

By the 1970s, the area's agriculture was greatly diminished. The 1974 USGS map for Relay shows further parceling of farm lots for single family houses. A large-scale office park/light industrial complex had been constructed north of the MD 295/MD 100 interchange. In the 1990s, I-195, which is the northern project limit, was constructed to connect I-95 and BWI. By the end of the twentieth century, the APE retained areas that were rural in character, but was becoming increasingly dominated by large-scale commercial development. In recent years, several large satellite parking lots for BWI customers have been built within the APE. Currently, an additional major office park/light industrial complex is under construction in the southern portion of the APE.

The APE contains agricultural and residential resources from the early and mid twentieth-century, along with several mid-twentieth century roadway structures. There is one previously recorded historic standing structure within the APE, which is included in the Maryland Inventory of Historic Properties (MIHP), the Charles A. Brauer House (AA-870). Field investigations revealed that the house and all associated outbuildings have been demolished. The property now belongs to a large corporate office park, which is currently under construction. A Maryland Inventory of Historic Properties (MIHP) addendum for the property is included as **Attachment 4**.

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Six

Ms. Hess conducted an intensive survey of the APE and identified 19 previously unidentified resources that are at least forty-five years old. The resources include an abandoned farmstead, 13 residential properties, one commercial property, one small structure, and three bridges. None of these resources is recommended eligible for the NRHP.

The property at 6070 Dorsey Road is an abandoned farmstead located to the east of MD 295. The property contains one dwelling, a garage, and two agricultural outbuildings. The former farmstead does not exhibit any distinctive characteristics and does not possess significant examples of rural architecture. The main dwelling is a common early twentieth century domestic property type, which is in a severely deteriorated condition. The agricultural outbuildings are not significant examples of a type. With the absence of significant historic architectural examples and deteriorated state of the extant structures, the property is not significant as a rural agricultural complex and is not recommended as eligible for the NRHP. SHA prepared a Short DOE form for 6070 Dorsey Road, which is provided in **Attachment 4**.

The 13 residential properties include 6964 Ridge Road, 7135 Race Road, 6559 Hanover Road, 1392 Hanover Road, 1384 Hanover Road, 1349 Hanover Road, 1336 Hanover Road, 1333 Hanover Road, 1328 Hanover Road, 7151 Rock Realty Drive, 1300 Hanover Road, 7197 Ridge Road, and 1250 Stoney Run Road, all in the Hanover vicinity. The majority of these properties are vernacular style, single family homes built in the early and mid-twentieth century. They are not associated with historic events (Criterion A) or significant persons (Criterion B), and they are not significant for their design or construction (Criterion C). The residential growth within the APE happened randomly over time and developed in a dispersed pattern. There is no distinguishable entity that might constitute a historic district within the APE. The above properties do not have historical significance and are not recommended as eligible for the NRHP as documented in the Short DOE forms included in **Attachment 4**.

Built circa 1960, 1272 Stoney Run Road is a commercial building that sits on a four acre lot on the northeast quadrant of the intersection of Ridge Road and Stoney Run Road. The building is currently occupied by Haney's Deli. It is a simple, one-story building clad in brick veneer and stucco. The property is not significant under Criterion A, B, or C and is recommended not eligible for the NRHP (**Attachment 4**).

Structure No. 0202100 carries MD 295 over Piney Run. Built in 1950, the small structure is a double span, concrete box culvert. The opening of each span is twelve feet in width and ten feet in height. This structure was evaluated in light of the criteria included in Small Structures on Maryland's Roadways: Historic Context Report (Parsons Brinckerhoff Quad & Douglas, Inc., 1997). Concrete box culverts are not considered individually eligible for the

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Seven

NRHP. The appearance and basic design of box culverts have changed very little since they were first constructed and there are numerous extant examples throughout the state. These structures are non-descript and are not significant from a technological standpoint. Structure No. 0202100 is not recommended eligible for the NRHP (Attachment 4).

Bridge No. 0202001 and Bridge No. 0202002 carry MD 295 southbound over Hanover Road. Designed by the J.E. Greiner Company in 1950, the bridges are a pair of identical concrete rigid frame structures. The bridges each have a span width of 36 feet and a roadway width of 50 feet. Rigid frame bridges are designed as monolithic structures, in which the superstructure and substructure are of one continuous fabric. Original decorative elements of both bridges included stepped pilasters and a corrugated pattern on the outside face of the concrete parapets. While the bridges' pilasters are still intact, the corrugated pattern has been covered over with a smooth concrete finish. The height of the original parapets has been increased by several feet by means of additional concrete barrier. Concrete bridges built after 1940 are generally associated with the continuing scientific testing and standardization of concrete highway bridge technology. The bridges do not have sufficient historical or engineering significance to be recommended eligible for the NRHP under any criteria. They are not eligible under Criterion A. Though the bridges were built as components of the Baltimore-Washington Expressway, they are not a part of the National Register listed portion of the roadway. The bridges are not associated with the lives of persons significant in our past (Criterion B). The bridges are not eligible for the NRHP under Criterion C for their design or construction. Character-defining elements (CDEs) for concrete rigid frame bridges include decks, parapets or railings, abutments, wing walls, and piers. With the exception of the parapets, the majority of Bridge No. 0202001 and Bridge No. 0202002's CDEs retain integrity; however, the bridges are two of many such bridges built throughout the state and lack architectural or engineering significance (Attachment 4).

Bridge No. 0201900 carries Ridge Road over MD 295. Ridge Road runs north-south and MD 295 runs southwest-northeast. Designed by the J.E. Greiner Company in 1948 and constructed in 1950, the bridge is a dual span, steel beam bridge. Bridge No. 0201900 has a roadway width of 44 feet and each span measures 60 feet in width. The spandrel walls and wing walls are faced with a granite veneer. Chain-link safety fences were attached to the parapets in 1978. Steel beam bridges built in the 1950s are generally associated with the increasingly heavy employment of metal girder/beam bridges for highway and railroad bridges by governmental authorities. The bridge does not have sufficient historical or engineering significance to be recommended eligible for the NRHP under any criteria. It is not associated with events that have made a significant contribution to the broad patterns of our history (Criterion A). Though the

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Eight

bridge was built as a component of the Baltimore-Washington Expressway, it is not a part of the National Register listed portion of the roadway. The bridge is not associated with the lives of persons significant in our past (Criterion B). The bridge is not eligible for the NRHP under Criterion C for its design or construction. Character-defining elements (CDEs) for steel beam bridges include beams, abutments, and piers. Bridge No. 0201900's CDEs retain integrity, however, the bridge is one of many such bridges built throughout the state and lacks architectural or engineering significance (Attachment 4).

SHA concludes that there are no NRHP eligible architectural properties within the APE for this project.

Archaeology: SHA Archeologist Carol A. Ebricht assessed the potential of the project area through consultation of the SHA-GIS Cultural Resources Database, historic and environmental mapping, aerial photographs, prior survey reports, and a field visit made on February 8, 2005.

Most of the project area is located in the Coastal Plain physiographic province, although the westernmost section extends into the Fall Line, the interdigitated boundary of the Coastal Plain and Piedmont provinces. The project area includes crossings of Deep Run and Stoney Run, both northward flowing tributaries of the Patuxent River, Piney Run, a major tributary to Deep Run, and smaller unnamed tributaries. Soils in the general vicinity belong to either the Evesboro-Rumford-Sassafras association, or the Loamy and Clayey land-Murkirk-Evesboro association. Both associations contain areas of deep, well-drained soils. Some of these soils and underlying unconsolidated sediments have been quarried for sand and gravel in historic times, and also formed a prehistoric source of quartz and quartzite cobbles used in the manufacture of some tools. Extensive deposits of red ochre are also present in the vicinity, potentially used for pigments in prehistoric times and as "paint ore" in historic times.

Examination of historic maps and atlases indicates that ancestral Hanover Road and ancestral Stoney Run Road were well established by 1860 (Martinet 1860). The Baltimore and Washington Railroad (now CSXT Railroad), forming the western project terminus for the Hanover road project, is also shown on the 1860 Martinet Map of Anne Arundel County. Structures were present on both sides of Hanover Road on 1860 (Martinet), 1878 (Hopkins), and 1901 (USGS) maps. The 1947 15-minute USGS topographic map, made following the construction of BWI Airport, indicates numerous structures along Stoney Run Road as well. The alignment of MD 295, built in the mid-20th century, crossed numerous mid-to late 19th century farmstead sites. The Baltimore-Washington Expressway, which became MD 295, appears on the 1947 map. Its alignment had been slightly straightened and interchanges had been added by 1974, as shown on the 7.5 minute photorevision of the Relay USGS topographic quadrangle.

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Nine

Prehistoric archeological potential for the general vicinity is high, and numerous sites have been previously recorded along streams and on stream divides throughout this region. Historic archeological potential is also high, although most sites in the immediate vicinity tend to be from the 19th or 20th century, rather than earlier historic time periods.

Major portions of the combined project areas have been previously investigated at intensities ranging from low level reconnaissance through Phase III data recovery. In addition, many archeological sites have been recorded in the general vicinity by early avocational archeologists, particularly along Stony Run, Kitten Run, and Deep Run (e.g. T.D. Jones n.d.; Stearns 1949). Site and survey data from the SHA-GIS database was supplemented on February 8, 2005, by consultation of more recent primary records at the Maryland Historical Trust. The attached table provides summary data about archeological sites in or adjacent to the project area (Attachment 5). Archeological sites included in Attachment 6 would appear to be directly affected by one or more of the alternatives, as they are known at this time.

The MD 295 corridor within the project limits was surveyed by Curry (1978). Three archeological sites are known in or near the MD 295 interchange with MD 100 (18AN596, 598, and 618), and several are known in or near the interchange with I-195 (18AN222, 245, 619, and 621). Site 18AN583 is located near the east side of MD 295 near Patapsco Valley State Park. Because widening of MD 295 would occur in the median, which has been substantially disturbed, this segment of the project generally has low archeological potential. However, special attention would also need to be paid to 18AN596, the NHP eligible Wilderness Site, which was fenced and preserved intact within the MD 295/MD 100 interchange. The proposed new interchange at Hanover Road will likely require additional archeological investigations, and storm water management facilities requiring right-of-way will need to be assessed. Two known sites are located in the proposed Hanover interchange area, 18AN400 (Bastian 1976) and 18AN516 (Garrow et al. 1980).

The Hanover Road segment of the project has not been previously surveyed, per se, although several surveys for other non-highway projects cross it or were conducted immediately adjacent to the proposed alignment. Several investigated areas are not shown on the SHA-GIS database (Hopkins and Harris 1997; Emory 2001; Sprenberg et al. 2001; Harris and Hopkins 2002). Two recorded sites are adjacent to Hanover Road near the western project terminus (18H033 and 18H0204), and one site is recorded at the eastern project terminus (18AN367). Numerous sites have been recorded around Stony Run Road near the "missing section" of Hanover Road, located on the divide between Deep Run and Stony Run, for the Stony Run Development Area (Garrow et al. 1980; Hopkins and Harris 1997; Harris and Hopkins 2000; Emory 2001). These include sites 18AN262, 18AN516, 1158, 1170, 1171, 1174, 1169, 1200. Areas to the north were surveyed by Sprenberg, Furgerson and Boyd (2001) for the MDOT and MAA headquarters within the Stony Ridge Technology Park.

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Ten

The high number of recorded sites in the general project vicinity suggests high archeological potential for large portions of the APE. These sites encompass the full temporal range of prehistoric occupation from Paleoindian through Late Woodland times, as well as later historic period sites. The project will be reassessed once the project scope has been fully defined and plans that include elements of the undertaking such as stormwater management (SWM) facilities, wetland mitigation, reforestation, construction access, and easements. It is likely that Phase I archeological investigations will be required for this project, including updating the current condition of previously recorded archeological sites. SHA will continue to coordinate with MHT regarding future identification and evaluation studies as project plans become more fully developed and the APE can be more precisely defined.

Review Request


Please examine the attached maps, plans, DOE forms, and Eligibility/Status Table (Attachment 6). We request your concurrence by January 23, 2006 that there are no NHP eligible historic standing structures within the APE. Once the archeological studies are completed, SHA will provide MHT with the opportunity to comment on the undertaking's effects. By carbon copy, we invite the Anne Arundel County Department of Planning and Code Enforcement, the Howard County Historic District Commission, and the Howard County Committee of the Maryland Historical Trust to provide comments and participate in the Section 106 process. Pursuant to the requirement of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR 800.2 (e) (4) and (6), and 800.3 (f) for information regarding the identification and participation of consulting parties, and 800.4, and 800.5 regarding the identification of historic properties and assessment of effects. For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's

Mr. J. Rodney Little
MD 295: MD 100 to I-195 and Hanover Rd.
Page Eleven

website, www.achip.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust). If no response is received by January 23, 2006, we will assume that these offices decline to participate. Please contact Ms. Melissa Hess at 410-545-8360 (or via email at mhess@sha.state.md.us) with questions regarding standing structures for this project. Ms. Carol A. Ebright may be reached at 410-545-2879 (or via email at cebright@sha.state.md.us) with concerns regarding archeology.

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by 
Mary F. Barse
Assistant Division Chief
Project Planning Division

Attachments: 1) Project Location Map
2) Project Plans
3) Area of Potential Effects Map
4) Determination of Eligibility Forms
5) Previously Recorded Archeological Sites Table
6) Eligibility/Status Table

cc: Ms. Mary F. Barse, SHA-PPD
Ms. Anne Bruder, SHA-PPD
Ms. Theresa Christian, SHA-PPD (w/Attachments 1, 3, 5 and 6)
Ms. Carol A. Ebright, SHA-PPD (w/Attachments 1, 3, 5, and 6)
Mr. Richard Ervin, SHA-PPD (w/Attachments 1, 3, 5, and 6)
Mr. Bruce Grey, SHA-OPPE
Ms. Carmelita Harris, SHA-OPPE (w/Attachments 1, 3, 5 and 6)
Ms. Melissa Hess, SHA-PPD (w/Attachments 1, 3, 5 and 6)
Mr. Joseph Kresslein, SHA-PPD
Ms. Zan Klodevey, Howard County Office of Planning and Zoning (w/Attachments)
Ms. Donna Ware, Anne Arundel County Department of Planning and Code Enforcement (w/Attachments)

Theresa

Concurrence with the MD State Highway Administration's
Determination(s) of Eligibility and/or Effects

Project Number: AA372A11 MBHT Log No. 200503707
Project Name: MD 295; MD 100 to I-195 and Hanover Rd
County: Anne Arundel and Howard
Letter Date: December 21, 2005

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table (Attachment 6)):
☒ Concur
☐ Do Not Concur

Effect (as noted in the Effect Table [N/A]):
☐ No Properties Affected
☐ No Adverse Effect
☐ Conditioned upon the following action(s) (see comments below)
☐ Adverse Effect

Agreement with FHWA's Section 4(f) criteria of temporary use (as detailed in the referenced letter, if applicable):
☐ Agree

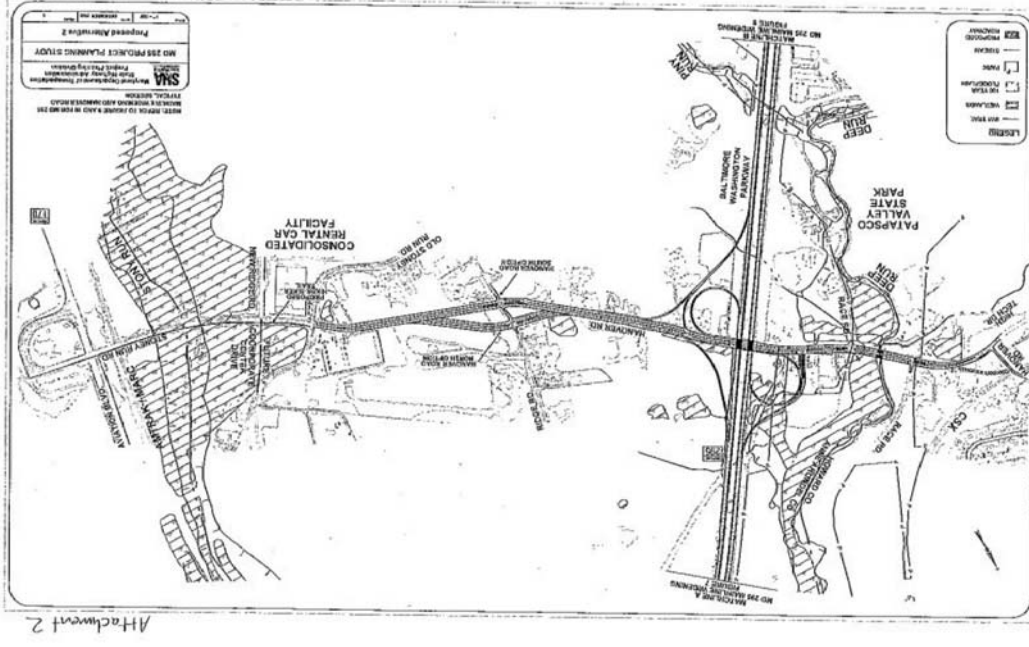
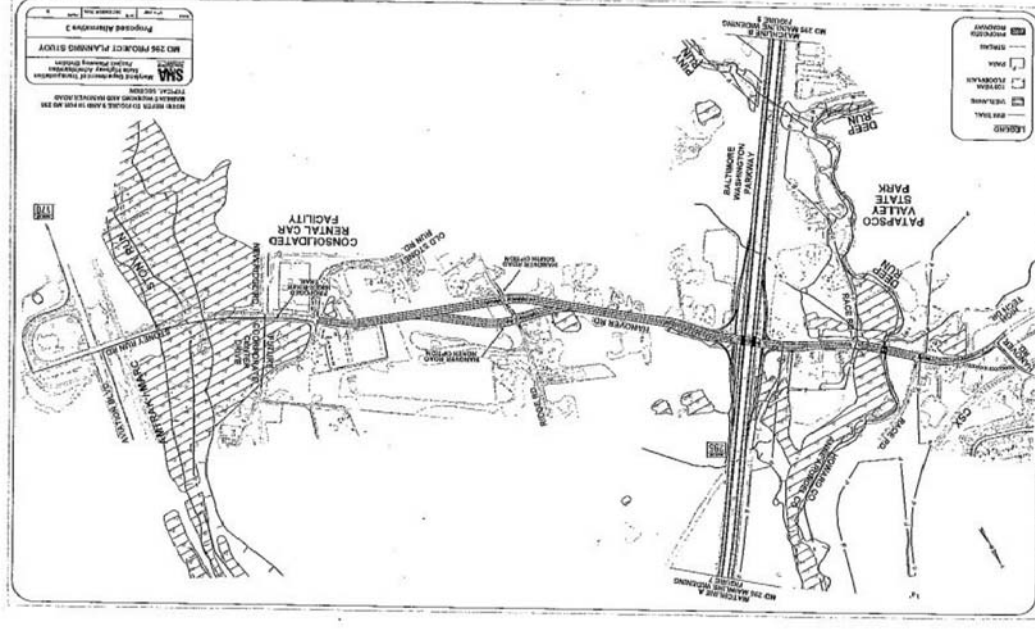
Comments:
 MBHT awaits further consultation as project planning proceeds to assess archeological potential and address the need for further investigations

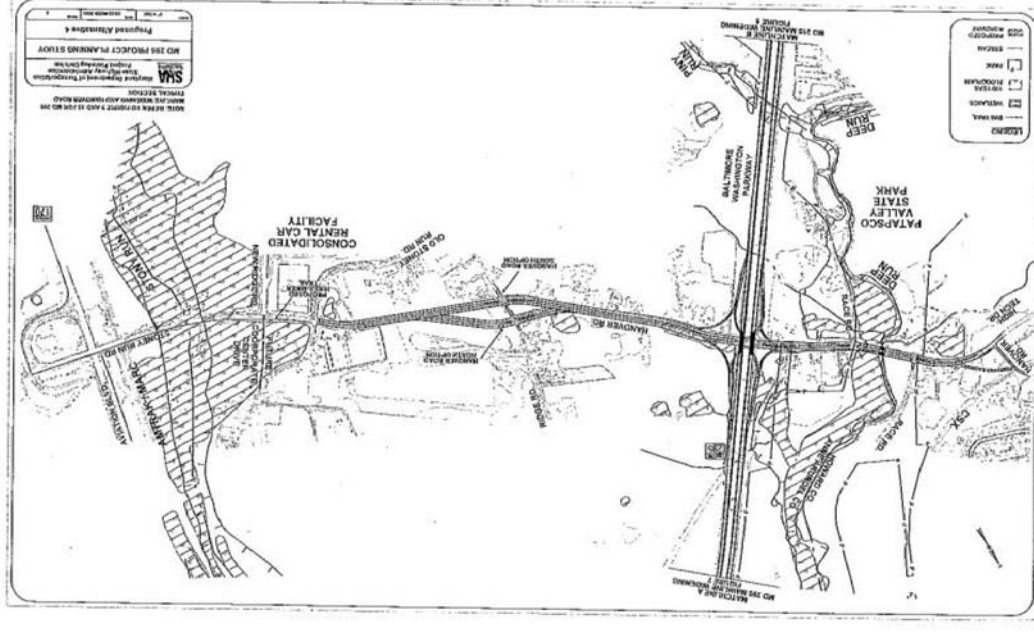
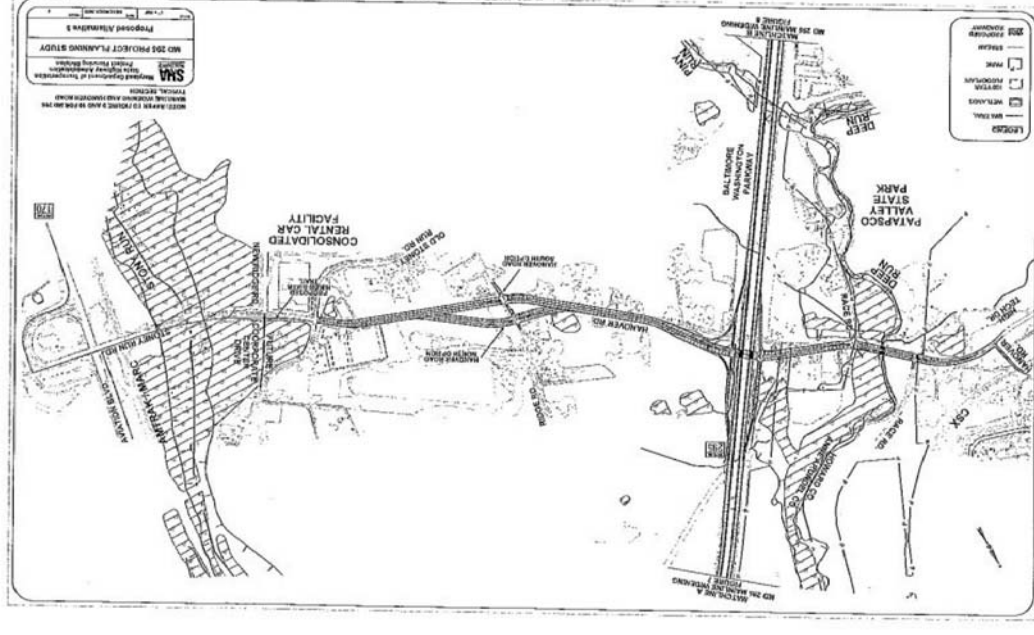
By: *[Signature]* Date: 3-10-06
 MD State Historic Preservation Office/
 Maryland Historical Trust

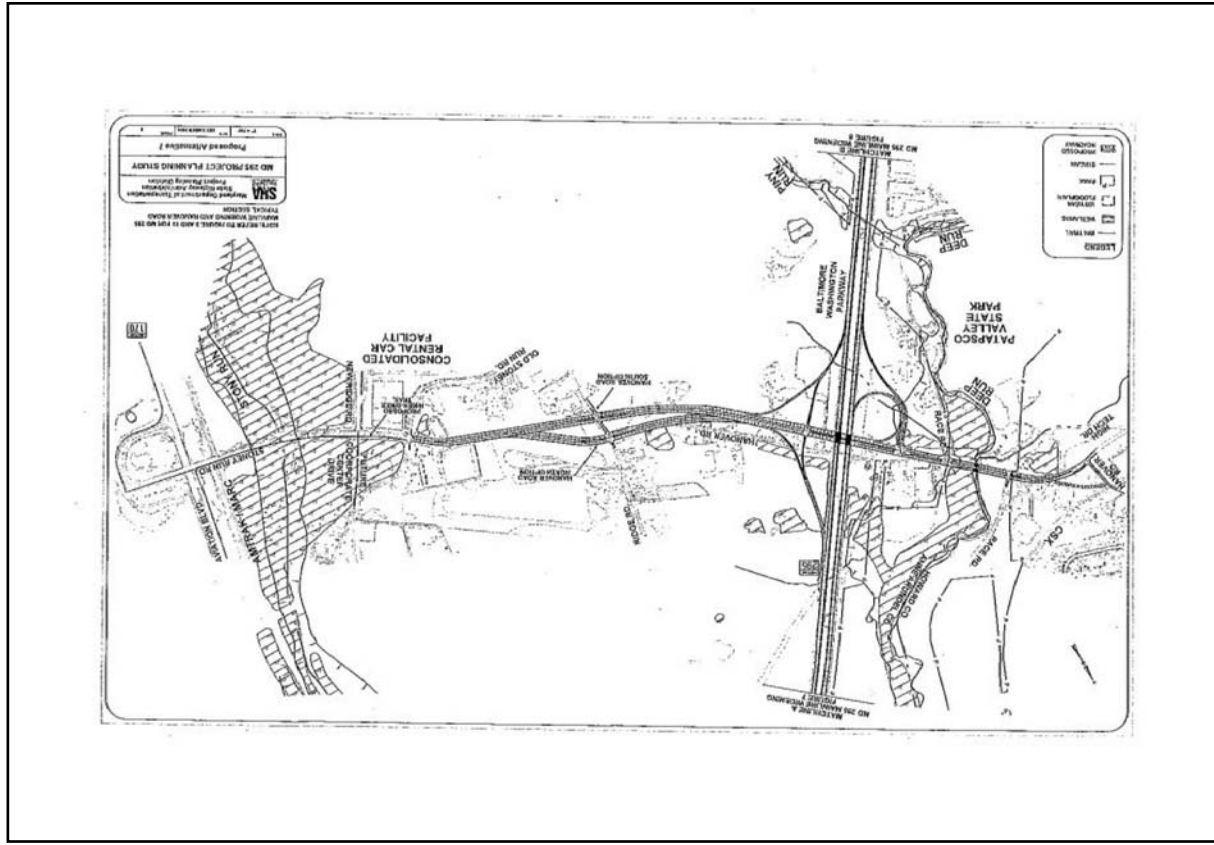
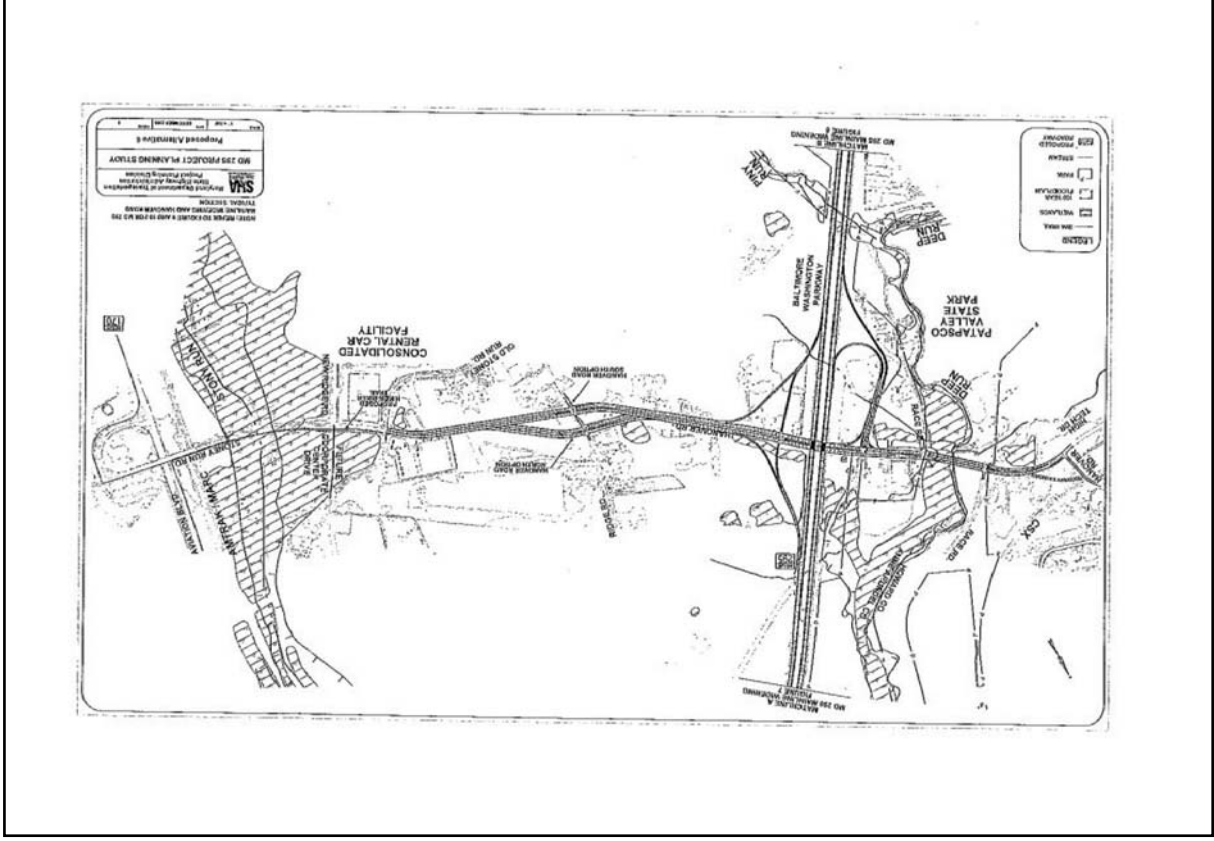
Return by U.S. Mail or Facsimile to:
 Ms. Mary E. Brawley, Assistant Director, Project Planning Division
 MD State Highway Administration, 21205-9717
 Telephone: 410-545-8564 and Facsimile: 410-520-5204

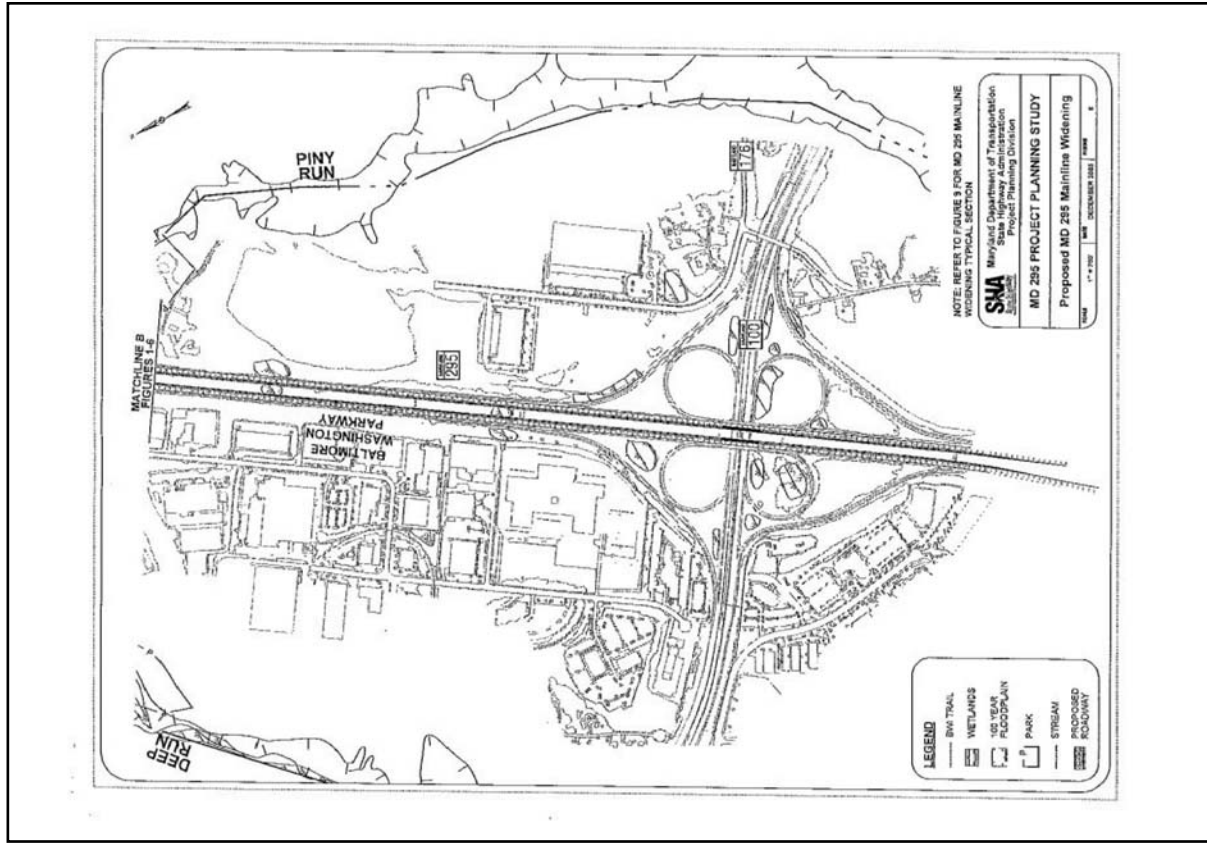
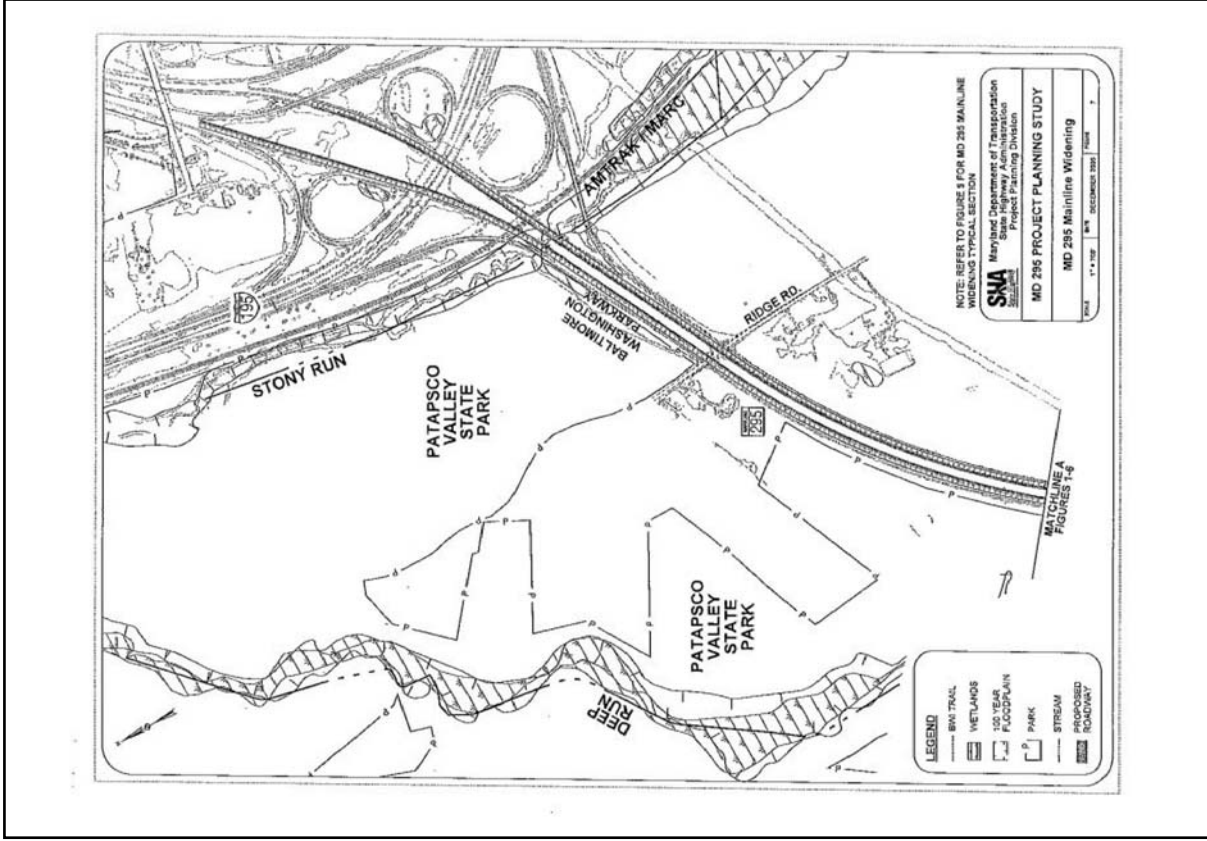
cc: Mr. Richard Ervin, SHA













Attachment 5
Previously Recorded Archaeological Sites In or Adjacent to the MD 295 and Hanover Road Project Area

| | | | | | |
|----------|---|---------|------------------------------------|---|---|
| 18AN1203 | Stearns # 3, Lower Deep Run W | Unknown | Prehistoric | No data | T.J. Jones and Stearns 1949 |
| 18AN1204 | Schultz Farm 2 | Hanover | Lithic workshop | Prehistoric | Not Eligible 5-5-93 |
| 18AN1222 | Lower Kileen Branch, T.J. Jones Field 5 | MD 295 | Lithic scatter | Prehistoric | Disturbance by sewer line, 1-195 |
| 18AN1243 | Pine Spring | MD 295 | Lithic scatter | Prehistoric | No data |
| 18AN1262 | Stony Run Station | Hanover | Lithic and sherd scatter, Domestic | Prehistoric | 1972; Curry 1977; Kinsey 1978 |
| 18AN1267 | Hannas North | Hanover | Lithic | Prehistoric | Conrad 1976; Curry 1977; Kinsey 1979 |
| 18AN1400 | Intersection | Hanover | Lithic | L.A. W | Recorded by Bashian 1976 |
| 18AN1516 | Jones | Hanover | Lithic scatter | MA, LA | Private collection (Bill Jones). Site from says "Nicks testing," but report says not eligible |
| 18AN1583 | Weeping Willow | MD 295 | Lithic scatter, Domestic | 19 th c | Disturbed in 1985 (quarrying) |
| 18AN1596 | Wilderness | MD 295 | Domestic | 18 th -19 th c | NRHP Eligible. Site preserved within MFD 100 interchange loop |
| 18AN1598 | Hannas-Tubbs Burial Ground | MD 295 | Contemporary | Late 19 th -early 20 th c | No data |
| 18AN1618 | MDOT-1 | MD 295 | Lithic scatter, Domestic | Prehistoric and late 19 th c | Some disturbance noted in 1987 |
| 18AN1619 | Emmitsville Site M-S | MD 295 | Domestic | Late 19 th -early 20 th c | Some disturbance noted in 1987 |
| 18AN1621 | Emmitsville Indian Site E-W | MD 295 | Lithic scatter | E.A. LA | Some disturbance noted in 1987 |
| 18AN1138 | U-W-Hanover 7 | Hanover | Domestic | Mid-20 th c | Not Eligible 8-3-00 |
| 18AN1169 | Yonkers | Hanover | Domestic | 20 th c | Not Eligible 8-3-05 |
| 18AN1170 | Rotweiler | Hanover | Domestic | 20 th c | Not Eligible 8-3-05 |
| 18AN1171 | Old Stony Run Rd. | Hanover | Domestic | 20 th c | Not Eligible 8-3-05 |
| 18AN1174 | Dodabo | Hanover | Domestic | 20 th c | Not Eligible 1-8-01 |
| 18AN1200 | Elbert Cole | Hanover | Domestic | L.W., 19 th -20 th c | Not Eligible 8-20-01 |
| | | | | | Hopkins and Harris 1997; Emory 2001 |

| Project Name: MD 295: MD 100 to I-195 and Hanover Road | | | | | | | | | |
|--|-------|------|-------------------|----------|----------------|----------|------|-------|--|
| Eligibility/Status Table | | | | | | | | | |
| Resource | SHANR | SHPO | Archaeological | Historic | Archaeological | Historic | SHPO | SHANR | Comments |
| Charles A. Branner House (AA-430) | S | X | Requested 12/2005 | | | | | | Demolished |
| 6964 Ridge Road | S | X | Requested 12/2005 | | | | | | |
| 7135 Race Road | S | X | Requested 12/2005 | | | | | | |
| 6070 Dorsey Road | S | X | Requested 12/2005 | | | | | | |
| 6559 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1392 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1384 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1349 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1336 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1333 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 1328 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 7251 Rock Realty Drive | S | X | Requested 12/2005 | | | | | | |
| 1300 Hanover Road | S | X | Requested 12/2005 | | | | | | |
| 7197 Ridge Road | S | X | Requested 12/2005 | | | | | | |
| 1272 Stoney Run Road | S | X | Requested 12/2005 | | | | | | |
| 1250 Stoney Run Road | S | X | Requested 12/2005 | | | | | | |
| Structure No. 0202100 | S | X | Requested 12/2005 | | | | | | |
| Bridge No. 0202001 | S | X | Requested 12/2005 | | | | | | |
| Bridge No. 0202002 | S | X | Requested 12/2005 | | | | | | |
| Bridge No. 0201900 | S | X | Requested 12/2005 | | | | | | |
| 18AN245 Pine Spring | A | ND | | | | | | | |
| 18AN367 Hammans North | A | ND | | | | | | | |
| 18AN400 Intersection | A | ND | | | | | | | |
| 18AN516 Jones | A | ND | | | | | | | |
| 18AN583 Weeping Willow | A | ND | | | | | | | 1980 site form indicates "Needs testing", but recommended site as not eligible. Reported to be disturbed in 1985 (Frye 1986) |
| 18AN596 Wilderness | A | NR | Pre-1992 | | | | | | Site preserved within MJD 295/ MJD 100 interchange |
| 18AN1200 Elbert-Cole | A | ND | 08/20/2001 | | | | | | |
| 18H033 Stearns #5 | A | ND | | | | | | | |
| 18H0204 Schultz Farm 2 | A | X | 05/05/1993 | | | | | | |

Codes: Resource Types: S (Structure), A (Archaeological Site), HD (Historic District), NHL (National Historic Landmark)
SHPO Option: (b) designates option regarding boundary. Code following date signifies SHPO opinion
NR Determination: ND (Not Determined), X (Not Eligible), NR (Eligible), NHL (Landmark)

Bold rows indicate review action requested

Please examine the attached plans, archaeological report and Eligibility Table. We request your concurrence by April 20, 2007 with our eligibility determinations for the proposed widening of MD 295, the widening and extension of Hanover Road, and the construction of a new interchange at MD 295 and Hanover Road. By carbon copy, we invite the Howard County Office of Planning and Zoning and the Anne Arundel County Office of Environmental and Cultural Resources to provide comments and participate in the Section 106 process. Pursuant to the requirements of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR 800.2 (c) (4) and (6), and 800.3 (f) for information regarding the identification and participation of consulting parties, and 800.4, and 800.5 regarding the identification of historic properties and assessment of effects). For additional information regarding the Section 106

My telephone number/cell-phone number is _____

Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2255 Statewide Toll-Free

Send Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone 410.543.3030 • www.marylandrelayservice.com

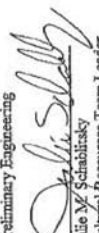
Mr. J. Rodney Little
Project No. AA372A11
Page Three

regulations, see the Advisory Council on Historic Preservation's website, www.achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust. If no response is received by April 20, 2007, we will assume that these offices decline to participate. Please call Ms. Melissa Blair at 410-545-8560 (or via email at mblair@sha.state.md.us) with questions regarding standing structures for this project. Ms. Carol A. Ehrig may be reached at 410-545-2879 (or via email at cehrigh@sha.state.md.us) with concerns regarding archeology.

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by:


Julie M. Schabli
Cultural Resources Team Leader
Project Planning Division

Attachments: 1) LOD Sheets for Stoner Run Rd. Ramps to MD 170
2) Phase I Archeological Report
3) DOE forms
4) Eligibility and Effects Table

cc: Ms. Melissa Blair, SHA-PPD (w/Attachment 4)
Ms. Theresa Christian, SHA-PPD (w/Attachment 4)
Ms. Carol A. Ehrig, SHA-PPD (w/Attachment 4)
Mr. Bruce M. Grey, SHA-OPPE
Ms. Carmelita Harris, SHA-PPD
Mr. Joseph Kresslen, SHA-PPD (w/Attachment 4)
Dr. Julie M. Schabli, SHA-PPD (w/Attachment 4)
Mr. Donald H. Sparklin, SHA-PPD (w/Attachment 4)
Ms. Jenna D. Solomon, Anne Arundel County Office of Environmental and Cultural Resources (w/Attachments)
Ms. Zan Kiodewey, Howard County Office of Planning and Zoning (w/Attachment 1 and 4)
Mr. Dan Johnson, FHWA

Concurrence with the MD State Highway Administration's
Determination(s) of Eligibility and/or Effects

Project Number: AA372A11 MHT Log No. 200700906
Project Name: MD 295 MD 100 to I-195 and the Extension of Hanover Rd.
County: Anne Arundel and Howard Counties
Letter Date: March 16, 2007

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table (Attachment 4)):

☒ Concur
☐ Do Not Concur

Comments/clarification on eligibility:

1. 18AN245 and 18AN367 – Both sites are destroyed
2. 18AN583 and 18AN1345 – Both sites were recently determined ineligible by the Trust on 2/7/07 as part of the Preston-Gateway project review

Effect (as noted in the Effect Table) N/A:

☐ No Properties Affected
☐ No Adverse Effect
☐ Conditioned upon the following action(s) (see comments below)
☐ Adverse Effect

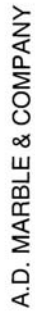
Comments on the draft Phase I archeology report:

1. The draft report should include a figure that illustrates the location of all the inventoried archeological sites within the APE on the appropriate section of USGS quadrangle, with an accompanying table that lists the sites' relevant condition (destroyed/extant/unknown), recommended eligibility for NRHP, and proposed treatment.
2. The report should present definitive statements of ineligibility for the NRHP for all relevant sites within the APE.
3. It is not necessary to include a NADB form in Appendix F as the Trust no longer maintains NADB for Maryland.

We look forward to receiving the draft report on the results of Phase II site evaluations on 18HO33, 18AN400 and 18AN1348 and to further coordination to complete the Section 106 review of this undertaking.

By:  Date: 5/15/07
MD State Historic Preservation Office/
Maryland Historical Trust

Return by U.S. Mail or Facsimile to:
Dr. Julie M. Schabli, Cultural Resources Team Leader, Project Planning Division,
MD State Highway Administration, P.O. Box 17, Beltsville, MD 21033-0017
Telephone: 410-545-8870 and Facsimile: 410-209-5004



375 E. Elm Street

Suite 200
To: Norman Lazarus
Fax: 410-537-3157

Suite 200
Conshohocken, PA 19428

Tel. 484-533-2500

From: Susan Lyons-Joell

Re: Wellhead Protection Information Request

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Dear Mr. Lazarus,

I am looking for any information regarding existing or proposed Wellhead Protection Programs, groundwater withdrawals, and private, commercial, and industrial community water wells and springs that may be located within the project area on the attached map. My initial information from the US EPA indicates that there are no sole source aquifers within the project area. If you could verify this, I would be much appreciative.

The map is at USGS scale, and shows an 800 foot buffer around the proposed project area. The proposed project will improve MD 295 from MD100 Interchange to the I-195 Interchange, and will construct a new interchange at Hanover Road. The project is located within Anne Arundel and Hanover Counties. The information will be used for compiling environmental documentation for MD SHA.

Please contact me if you have any questions or need additional information. Please let me know if the results will not be available by Friday, August 25th, as our time schedule is very tight for this project.

Thank you very much for your assistance! I can be reached at 484-533-2559 or susanlj@admurble.com. Our fax number is 484-533-2599.

Sincerely,

Susan Lyons-Joell
Environmental Scientist
A.D. Marble and Company, Inc.

.....

AUG-23-2006 15:51 FROM: MDE MSP

410 537 3157

TO: 4945332599

P.1/2



Fax

Maryland Department of the Environment
Water Supply Program
 1800 Washington Blvd., STE 450
 Baltimore, MD 21230-1708
 Phone: 410-537-3702 Fax: 410-537-3157

To: Susan Lyons - Bell From: Norman Szymaniak

Fax: 410-537-3157 Page: 2

Phone: 410-537-3702 Date: 8/22/06

Re: Wellhead Protection Info. CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Attached is a map showing a public water supply well with a Wellhead Protection Area around it.

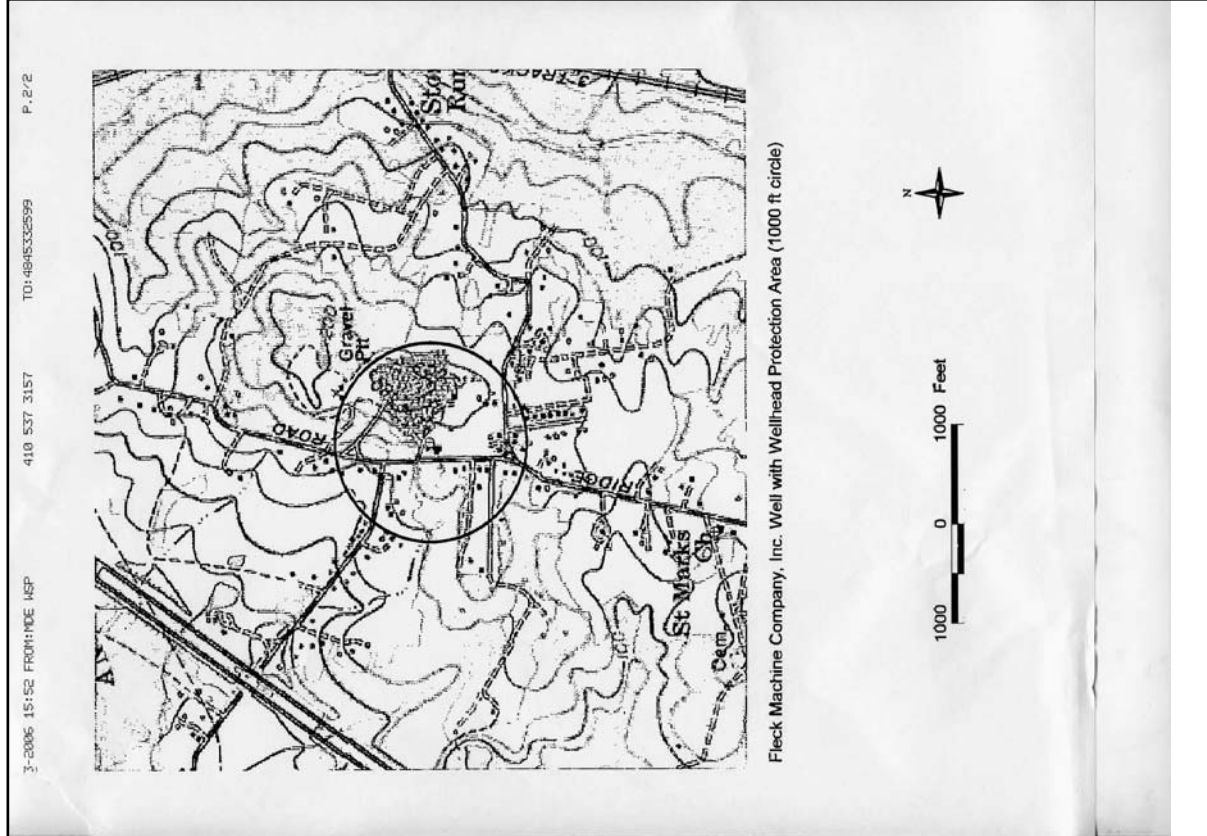
The well tag number is RA-81-7934
 Total Depth 255ft
 Casing Depth 245ft


The well serves the Fleck Machine Co, Inc, which is considered a Nontransient Noncommunity Water System.

The aquifer is Potomac fm. it is considered a confined aquifer.

This well is within the buffer zone that you had for the Hanover Road interchange.

There are no designated sole source aquifers within the area.




HOWARD COUNTY DEPARTMENT OF POLICE
 3410 Courthouse Drive, Ellicott City, MD 21043

WILLIAM J. MCMAHON
Chief of Police

OCT 26 '06 PM 12:51 EDT

JAMES N. ROBEY
County Executive

October 23, 2006

 Bruce M. Grey
 Deputy Director
 Office of Planning and
 Preliminary Engineering


Dear Mr. Grey:

 After a thorough and careful review of your proposed change to widen Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County, I believe that the road widening project would be harmful to the quality of life to the residents of Harwood Park. Commuters that now access MD 295 via major roadways would use the feeder roads to get to Hanover Road to MD 295. The feeder roads consisting of Old Washington Boulevard, Loudon Avenue and the remaining section of Hanover Road were not designed to accommodate heavy commuter traffic. These roads are narrow and wind through residential communities. Such an increase in traffic would have a negative impact on the community.


 Approximately two years ago, there had been a proposal to create a cul-de-sac on Hanover Road by the CSX railroad tracks. This proposal would have prevented commuters from taking a short cut through Hanover Road to MD 295.

 An increase in commuter traffic through the Harwood Park community would slow down the response time for both Howard County Police and Fire services.

 In conclusion, the Howard County Police Department is not in favor of the proposed widening of Hanover Road without the creation of a cul-de-sac at the CSX railroad tracks.

Sincerely,

 William J. McMahon
Chief of Police
 WJMP/C

Cc: Joseph R. Kreslein


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 HCYPD@CO.HO.MD.US



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John D. Poccia, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation

June 27, 2007

Re: Project No. AA372A11
MD 295: from MD 100 to I-195; and,
Hanover Road: from High Tech Drive to
MD 170 (Aviation Boulevard)
Howard and Anne Arundel Counties

Mr. William J. McMahon, Chief of Police
Howard County Department of Police
3410 Courthouse Drive
Ellicott City, MD 21043

Dear Chief McMahon:

Thank you for your letter regarding the MD 295 Project Planning Study in Howard and Anne Arundel counties. The Maryland State Highway Administration (SHA) appreciates the Howard County Department of Police's input on the proposed project and would like to take this opportunity to address your comments.

The MD 295 Project Planning Study includes the widening of MD 295 to six lanes between MD 100 and I-195, the addition of an interchange at MD 295 and Hanover Road and the widening of Hanover Road from High Tech Drive to MD 170. We understand that the closing of Hanover Road over the CSX railroad tracks has been an issue that Howard County has been studying for a few years. In 2004 at a local community association meeting, the Howard County Department of Public Works (HCDPW) presented the option to test a closure of Hanover Road again by providing a cul-de-sac at the eastern end of Hanover Road, but the community decided they did not want the closure study to take place. However, the group decided at that time to reconsider the issue under the current Project Planning Study.

The Howard County Department of Planning and Zoning has been a partner in the MD 295 Project Planning Study since the beginning of the study and has assisted the SHA in the development and refinements of the alternatives under consideration. Under direction from Howard County, the study team has maintained the connection over the CSX railroad tracks as part of this study. The ultimate decision on the Hanover Road crossing of CSX is a local county decision. The SHA will respect any decision Howard County takes with respect to the crossing. However, the connection to the narrower and residential section of Hanover Road is being designed to allow local connection but discourage cut through traffic. The proposed Hanover

My telephone number/toll-free number is _____
Maryland Relay Service for Impaired Hearing or Speech: 1.800.735.2258 Statewide Toll Free
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone: 410.545.0300 • www.marylandroads.com

Chief McMahon
Project No. AA372A11 – MD 295/Hanover Road
Page Two

Road would tie into High Tech Drive/Coca Cola Drive with a right turn lane for those vehicles traveling to the residential area. While there may be some increase in traffic, we expect High Tech Drive and Coca Cola Drive would handle most of the traffic from Hanover Road.

Thank you again for your involvement in this study. Should you have any questions or need further assistance on this or any other matter, please feel free to contact Ms. Carmelella Harris, Project Manager, at 410-545-8522 (toll free at 800-548-5026) or by e-mail at charris@sha.state.md.us; or Ms. Theresa Christian, Environmental Manager, at 410-545-8697 or by email at tehrisian@sha.state.md.us.


Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by:

Joseph R. Kresslein
Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

cc: Mr. Dennis Atkins, SHA-PPD
Ms. Theresa Christian, SHA-PPD
Mr. Bruce Grey, SHA-PPD
Ms. Carmelella Harris, SHA-PPD
Mr. Joseph Kresslein, SHA-PPD



Howard County
MARYLAND

DEPARTMENT OF FIRE & RESCUE SERVICES

Chief Joseph A. Herr

25 October 2006

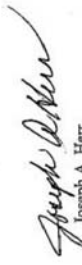
Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering
State Highway Administration
707 N Calvert Street
Baltimore, MD 21202

Subject: Project No. AA372A11

Dear Mr. Grey:

The Howard County Department of Fire and Rescue Services has no comments regarding the proposed changes reflected in the aforementioned project. The improvements to Hanover Road will enhance our response capabilities to that area of the County.

Sincerely,



Joseph A. Herr
Fire Chief

JAH:nlm

OCT27'06 PM 2:11 (B)PE

6751 Columbia Gateway Drive, 4th Flr. • Columbia, MD 21046 • (410)313-6000 • Fax 313-6027 • TDD 313-2323

*James Teare, Sr.
Chief of Police*

ANNE ARUNDEL COUNTY
M A R Y L A N D
*John R. Leopold
County Executive*

March 6, 2007

Joseph R. Kresslein, Assistant Division Chief
Project Planning Division
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kresslein:

I am in receipt of your letter requesting our input in determining how emergency services and response times would be affected by the proposed project on MD 295. I asked the following members of our command staff to assess the proposed project:

- Captain Joe Jordan, Commander of the Northern District where the roads in questions are zoned
- Lieutenant Tom Wilson, Commander of the Emergency Operations Center
- Lieutenant Doyle Batten, Commander of the Management and Planning Section

They agree that, once completed, the project will likely improve emergency response times by providing additional travel lanes and improved shoulders. Emergency vehicle travel during construction, as with other projects, will be impeded. This impediment should be reduced considering the construction will occur near the Northern and Western District service boundaries.


Sincerely,
David E. Pressley
Acting Deputy Chief David E. Pressley
Commander, Field Operations Bureau

DEP/tbb

Nationally Accredited Law Enforcement Agency

Police Department
8495 Veterans Hwy.
Millersville, MD 21108
(410) 222-8500
Fax #: 410-987-9167

MAR 12 '07 #1 7403 JTYE



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
C. Ronald Franks, Secretary

November 9, 2006

Ms. Theresa Christian
State Highway Administration
707 N. Calvert Street, C-301
Baltimore, MD 21202

Re: Patapsco Valley State Park
Right of Entry Agreement
Hanover Road
Anne Arundel/Howard Counties, 06-DNR-224

Dear Mr. Christian:

Attached for your information and file is one original copy of the fully executed right of entry agreement for the above noted project. As a reminder, all work must be coordinated with the Park Manager as set forth in Section 2.2 of the agreement.

Thank you for your continued assistance.


Sincerely,

Jean M. Lippard
Jean M. Lippard, Director
Land and Property Management

jml
Attachment
Copy: Butch Norden (w/att.)
Gary Burnett (w/att.)
Daryl Anthony

NOV 15 '06 PM 1:43 PPT

Land and Property Management
lippard@dnr.state.md.us 580 Taylor Ave. E-4 Annapolis, Maryland 21401 410-260-8433 410-260-8404 (fax)



Patapsco Valley SP
SHA - Hanover Road
06-DNR-224

RIGHT OF ENTRY

THIS RIGHT OF ENTRY AGREEMENT (the "Right of Entry"), made this 9th day of Nov, 2006, by and between the State of Maryland, to the use of the Department of Natural Resources, (the "Grantor") and the State Highway Administration (the "Grantee");

WITNESSETH, WHEREAS, Grantor is the owner of a certain parcel of real property situate and lying in Anne Arundel and Howard Counties, Maryland, as more fully described in a deed dated June 4, 1988, from the City of Baltimore to Grantor and recorded among the Land Records of the aforesaid County at Liber 1219, folio 227; in a deed dated December 12, 1958, from the Arundel Corporation to Grantor and recorded among the Land Records of the aforesaid County at Liber 325, folio 83; and in a deed dated January 1, 1962, from the B & O Railroad to Grantor and recorded among the Land Records of the aforesaid County at Liber 390, folio 493; (the "Land"); and

WHEREAS, Grantee desires to enter a portion of the Land (the "Area") in those areas more particularly shown outlined on Exhibit A, attached hereto and made a part hereof for the purpose of archeological and environmental surveys; and

WHEREAS, Grantor is willing to grant to Grantee a right of entry onto the Area, subject to the terms and conditions contained herein and subject to the operation and effect of any and all instruments and matters of record or in fact;

NOW, THEREFORE, in consideration of the mutual entry into this Right of Entry by the parties hereto, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the parties agree as follows.

Section 1. Grant of Right of Entry.

1.1. Grantor hereby grants to Grantee a non-exclusive right to enter the Land in the Area outlined on Exhibit A, for and only for the purpose of performing archeological and environmental surveys as part of the adjacent Hanover Road interchange project. This Right of Entry shall include the right to enter the Area by Grantee's contractors and agents solely for the aforementioned purpose under the supervision and control of Grantee and in accordance with the terms and conditions of this Right of Entry.

1.2. Grantor reserves the right to continue to use the Land, including the Area, without limitation to include public hunting.

1.3. Grantee shall have the right of ingress or egress over the Area, said ingress and egress shall be along the lines as designated on Exhibit A.

1.4. The granting of this Right of Entry does not convey to Grantee any interest in or to any mineral rights.

1.5. This Right of Entry is subject to the operation and effect of any and all instruments or matters of record or in fact.

1.6. Grantee shall provide a full report of all archeological and environmental surveys to Grantor's Policy and Planning section within ninety (90) days of completion of work.

1

1.7. Grantee agrees and understands that no protected or endangered species of plants will be disturbed.

1.8. Grantee shall restore any disturbed survey area to a condition equal to or better than original condition.

Section II. Term:

2.1. Grantee's Right of Entry shall be for a term of 365 days, beginning on the date this Right of Entry is executed by both parties and terminating 365 days from that date, at which time Grantee and any of its contractors, agents, servants, employees, licensees and/or invitees, shall vacate the Land and Area.

2.2. Grantee shall notify the Area Manager, Gary Burnett (telephone 410-461-5005), at least three (3) days prior to entry onto the Area, and immediately if any unusual conditions are encountered. Grantee shall provide the following information to the Area Manager during the aforesaid notification:

a. Access Routes to and from the work area.

b. Type, size, and number of vehicles and crews to be used to conduct the work.

c. A copy of all plans, drawings, permits, etc.

Section III. Use of Premises:

3.1. Compliance with Laws. Grantee shall be responsible for obtaining and delivering copies of all permits, licenses, inspections and approvals required for its use and operation on the Land and the Area. Grantee's use of the Land and the Area shall be in compliance with the requirements of all applicable Federal, State and local laws, ordinances, rules and regulations.

3.2. Grantee agrees that Grantor and/or Area Manager reserves the right to order the immediate cessation of work in the event Grantee fails to abide by any condition herein contained or any conditions or requirements contained in permitting procedures, unless corrective action is initiated by Grantee within twenty-four (24) hours following telephonic notification to Grantee by Grantor, and Grantee diligently pursues such corrective action thereafter until completion.

3.3. Repair. Upon completion of work on the Land and Area, Grantee agrees to repair any damage and to restore any disturbed areas to existing grade and in a condition equal to or better than the original condition.

3.4. Grantee agrees that there shall be no use nor spraying of pesticides and/or herbicides on the Land or the Area.

3.5. Grantee agrees that any and all trimming of trees, cutting of timber and/or clearing of the Land and the Area will be reviewed and inspected by the Area Manager, before any work is initiated, to insure that all such cutting, etc., is within the Area.

3.6. Grantee agrees that there shall be no burning, burial or disposal of any waste or excess materials, of any kind, on the Land or Area.

Section IV. General:

4.1. Effectiveness. This Right of Entry shall become effective on and only on its execution and delivery by each party hereto.

4.2. Amendment. This Right of Entry may be amended by and only by an instrument executed and delivered by each party hereto.

4.3. Applicable law. This Right of Entry shall be given effect and construed by application of the law of Maryland.

4.4. Exhibits. Each writing or plat referred to herein as being attached hereto as an exhibit or otherwise designated herein as an exhibit hereto is hereby made a part hereof.

4.5. Assignment. Grantee shall not be permitted to assign or in any manner transfer its rights and obligations under this Right of Entry without obtaining the prior written consent of Grantor, which may be granted or withheld in Grantor's sole discretion.

4.6. Termination for Convenience. This Right of Entry may be terminated by Grantor in accordance with the terms in which it was issued, and at any time in which Grantor determines that such termination shall be in the best interest of the State of Maryland.

IN WITNESS WHEREOF, Grantor and Grantee have hereunto set their hands and seals in the day and year above written.

WITNESS:

GRANTOR:
STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
BY: Kristin M. Shanden (SEAL)
Assistant Secretary

GRANTEE:
STATE HIGHWAY ADMINISTRATION
BY: Michael Jones (SEAL)
Date: 10/3/04

Approved as to legal form and sufficiency this 23 day of October, 2006
Michael P. Conroy
Assistant Attorney General

Approved this 9 day of November, 2006
[Signature]

3

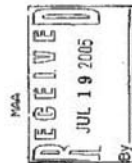
MD 295 Project Planning Study

Environmental Assessment

62

11/02/2006 11:53 410-855-7862

PAGE 03/04



Maryland Division
City Crescent Building
10 S. Howard Street
Baltimore, Maryland 21201

July 14, 2005

Mr. Terry J. Page
Federal Aviation Administration
23723 Air Freight Lane
Suite 210
Dulles, Virginia 20166

Refer Reply to: HDA-MD

Dear Mr. Page:

Re: AA372A11 MD 295; MD 100 to I-95
and Hanover Road Anne Arundel and Howard Counties, Maryland

The Federal Highway Administration (FHWA) in cooperation with the Maryland Department of Transportation (MDOT) is proposing to improve MD 295 from MD 100 to I-95 including improvements to Hanover Road from Coca-Cola Drive to MD 170 in Anne Arundel and Howard Counties, Maryland. The overall need for the project includes improving existing capacity, traffic operations, and safety along MD 295. A secondary need is to improve connectivity between the Baltimore and Washington Metropolitan Regions as it relates to the Baltimore Washington International (BWI) Airport and to support existing and planned economic development in and around BWI. The purpose and need statement has been circulated to the appropriate Federal and state agencies for review and comment. We have attached a copy for your review and comment.

The potential environmental concerns associated with the project include impacts to wetlands and waterways, woodlands, cultural resources, and Federal and state listed endangered or threatened species. We are requesting the Federal Aviation Administration's (FAA) participation as a cooperating agency in the preparation of the environmental document for the project.

FHWA, as the lead agency in the development of this project, will be responsible for preparation of the environmental document and the ultimate decision in selection of the alternative location for the project. The FAA's participation in the NEPA process will include providing support personnel to guide FHWA, MDOT, as well as the consultant study team to assure that the FAA's concerns are addressed.

Should you wish to discuss this matter, please contact Ms. Caryn Brodman of my staff at (410) 779-7146.

Sincerely yours,


Caryn Brodman
Caryn J. Brodman
Division Administrator



11/82/2096 11:53 418-689-7862 MAA

11/82/2096 11:53 418-689-7862 MAA

PAGE 02/64



FAA
Airports Division
Eastern Region

Washington Airports District Office
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
(703) 661-1354

July 28, 2005

Mr. Nelson J. Castellanos, Division Administrator
Federal Highway Administration
Maryland Division
City Crescent Building
10 S. Howard Street
Baltimore, MD 21201

Re: AA272A11 MD 295; MD 100 to I-195 and Hanover Road, Arnie Arundel and Howard Counties, Maryland

Dear Mr. Castellanos:

We have received and reviewed your letter of July 14, 2005, inviting the Federal Aviation Administration to participate as a cooperating agency in the preparation of the environmental document for the above referenced project. This letter is to inform you that we will be pleased to participate and cooperate with the Federal Highway Administration (FHWA) in the preparation of the environmental document.

As the lead agency responsible for the federal actions associated with development at Baltimore-Washington International Airport (BWI), our office has a significant interest in the development plans around the airport. In addition, there is a parallel environmental effort that the Maryland Aviation Administration (MAA) will undertake concerning the land on the west side of the airport, in the area where the subject roadway improvements are proposed. The MAA's environmental study will need to evaluate and include the impacts of the roadway improvements, and likewise, your environmental document will need to include the development proposed by the airport. This cooperation will benefit both agencies with meeting our requirements under the National Environmental Policy Act.

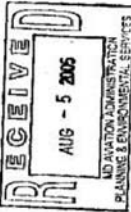
We request that you provide us a copy of the scope of work for the environmental study and the project schedule so that we can be prepared for upcoming efforts.

If you have any questions, please do not hesitate to contact me.

Sincerely,
Original Signed By
Terry J. Page

Terry J. Page, Manager
Washington Airports District Office

cc: MAA, Mr. Shank's upcoming ✓
FAA, AEA-610, Mr. Brooks w/ upcoming





Maryland Aviation Administration

Martin O'Malley
Governor
Anthony G. Brown
Lt. Governor
John D. Perout
Secretary

Timothy L. Campbell, A.A.E.
Executive Director

July 26, 2007

Mr. Thomas A. Priscilla, Jr., P.E.
Baltimore Metro Engineer
Federal Aviation Administration
Washington Airports Districts Office
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166

SUBJECT: Baltimore/Washington International Thurgood Marshall Airport (BWI)
Maryland State Highway Administration (SHA) - MD295/Hanover Road &
Stoney Run Road Interchange Improvements (Project Planning Level)

Dear Mr. Priscilla:

The Federal Highway Administration and the Maryland State Highway Administration (SHA) are conducting a Project Planning study on MD295 (Baltimore Washington Parkway) from MD 100 to I-195 and Hanover Road from Hi Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County. All of the build alternatives include the widening of MD 295 as well as improvements along Hanover Road. The project location is within close proximity to the Baltimore/Washington International Thurgood Marshall Airport (BWI) and a portion of the project lies on property owned by the Maryland Aviation Administration (MAA).

Project Details

The existing MD295 mainline would be widened to six lanes along the inside of the roadway from south of the MD 100 interchange to north of the I-195 interchange. A 12-foot lane and a 10-foot shoulder would be added to the inside of the existing roadway, providing three 12-foot lanes, a 10-foot inside shoulder and a 12-foot outside shoulder in each direction. Hanover Road will be upgraded to a four-lane roadway (two lanes in each direction). 12-foot inside lanes and 16-foot outside lanes to accommodate bicyclists. It will include an 18-foot median, a 10-foot hiker/biker trail on the north side and a 5-foot sidewalk on the south side between Hi Tech Drive in Howard County and Corporate Center Drive in Anne Arundel County. Hanover Road would also be extended east beyond Corporate Center Drive/New Ridge Road as a 4-lane undivided roadway with a 10-foot hiker/biker trail on the north side. All of the build alternatives would add a ramp from southbound MD 170 (Aviation Boulevard) onto Stoney Run Road and a ramp from Stoney Run Road to southbound MD 170. The ramp from Stoney Run Road to southbound MD 170 would fall within the Runway Protection Zone and Approach Surface for Runway 10.

P.O. Box 8768, BWI Airport, Maryland 21240-0768 • 410-659-7100 • TOLL FREE: 1-800-435-8294
TTY/TTDD for the hearing impaired: 410-859-7227 • www.bwiairport.com
The Maryland Aviation Administration is an agency of the Maryland Department of Transportation

Mr. Thomas A. Priscilla Jr., P.E.
Page Two

Alternatives

The build alternatives differ among the interchange proposed at MD 295 and Hanover Road as well as two different alternative alignments for Hanover Road. Alternatives 3 and 4 keep Hanover Road on its existing alignment, while Alternatives 3A, 4A, 7 and 8 relocated Hanover Road approximately 200 feet south of the existing alignment. Alternative 3 and 3A propose a compressed diamond interchange at MD 295 and Hanover Road. Alternative 4 and 4A propose a single point urban interchange at MD 295 and Hanover Road. Alternative 7 includes a loop ramp in the southwestern quadrant of the interchange and one way one directional ramps would be built on the north and south east quadrants of the interchange. Alternative 8 proposes a diverging diamond interchange at MD 295 and Hanover Road. All of the referenced alternatives have been enclosed for reference.


Enclosures

SHA has prepared an exhibit (Conversion Request) which is an integration of several concept alternatives, thus it defines a worst case scenario for Project Limits of Disturbance (LOD). The exhibit corresponds with two tables; the first table (eight pages) identifies the coordinates for the LOD in terms of latitude and longitude and the second table (one page) identifies coordinates and elevations for six possible traffic signals along Hanover Road. Each traffic signal is proposed to be 30 feet above ground level. Due to the mass quantity of coordinates that correspond with the LOD defined on the exhibit, we have enclosed a CD which contains an Excel spreadsheet with these points should the FAA need to access them for further coordination.

MAA has prepared an exhibit (BWI Part 77 Surfaces - MD295) which references the project LOD and interaction with FAR Part 77 Surfaces for BWI. Given the project assumptions on location and elevation, the proposed project does not appear to have any impact to Part 77. This statement also applies to the proposed traffic signals at Points 1 through 6. At this time it is premature to address construction equipment, therefore no detail has been included for analysis.

In addition to the CD, eight copies of the aforementioned enclosures have been organized in the following order for reference:

- FAA Form 7460-1 Notice of Proposed Construction or Alteration
- Figures for MD 295 Project Planning Study Alternatives
- Conversion Request Exhibit - Project LOD
- Conversion Request Table - LAT/LON
- Potential Traffic Signal Table - LAT/LON, Elevation, Structure Height

| | | | |
|---|--------------|-----|------------|
| 07/26/2007 16:34 | 410-859-7082 | MAA | PAGE 84/84 |
| <p>Mr. Thomas A. Priscilla Jr., P.E. Page Three</p> <p>Summary The SHA is in the project planning stage for improvements to MD295/Hanover Road & Stoney Run Road Interchange. SHA desires to proceed with environmental analyses on this project and would like to solicit comments from Federal agencies at this time. As this project will be subject to future edits and construction equipment will be required during construction effort, we ask that Federal Aviation Administration (FAA) Washington Airports District Office (WADO) evaluate the enclosed detail with the understanding that further coordination with your office is required. Given no anticipated Part 77 impacts and to remain consistent with the SHA project schedule, MAA's Office of Planning and Environmental Services (OPES) requests that FAA WADO solely review and respond to this matter. If you should however deem that further FAA coordination is required, the necessary copies are enclosed for dissemination.</p> <p>If you have any questions regarding this project, or require any additional information, please contact me at 410-859-7089. Thank you for all of your assistance with this matter!</p> <p>Sincerely,  Shawn P. Ames, Manager Division of Airport Facilities Planning</p> <p>Enclosures</p> <p>cc: Ms. Robin M. Bowie, Manager, Division of Environmental Planning, MAA Mr. Wayne B. Schuster, Director, OPES, MAA Mr. Alvaro Sifuentes, Project Manager, Jacobs VIA FACSIMILE: 410-837-3277 (Tower Two, Suite 1000), 100 South Charles St, Baltimore MD 21201</p> | | | |

MD 170 (Aviation Blvd.) at Stoney Run Road
Direct Access Ramps

Background

The Maryland State Highway Administration (SHA) is currently conducting a Project Planning Study on MD 295, from MD 100 to I-195, and along Hanover Road from Hi Tech Drive to MD 170 (Aviation Blvd.). The purpose of the project is to improve the existing capacity, safety and operations of MD 295 and to enhance Hanover Road as a secondary access to BWI Thurgood Marshall Airport and the BWI services area. These improvements would also provide sufficient capacity for existing and planned economic development near BWI.

Stoney Run Road which intersects MD 170 currently serves as the main entrance to the Airport's Consolidated Rental Car Facility, several satellite parking lots, the new Maryland Department of Transportation (MDOT) headquarters and a large commercial park nearby. In addition to the existing developed areas served by the intersection, there are other planned business developments in the immediate area that would add demand to the intersection, including Stoney Ridge Technology Park - Phase II.

The intersection currently operates with two dedicated left turn lanes on southbound MD 170 to Stoney Run Road at a signalized intersection. Vehicles traveling from Stoney Run Road to either northbound or southbound MD 170 utilize a partial loop ramp east of MD 170 to make turns onto MD 170 at the signalized intersection.

The project planning study did not initially include any improvements to this intersection. However, at the request of several team members, including our sister agency the Maryland Aviation Administration (MAA), the study team was directed to incorporate direct access ramps to and from MD 170 tying into Stoney Run Road as a part of this study.

In order to alleviate traffic congestion these ramps will be needed in the near future. Additional growth in the area and lack of alternate access to destinations off and near the intersection will cause the intersection to fall within the next 5 years.

Direct Access Ramp Description

The SHA developed two direct access ramps. The first direct access ramp would depart from southbound MD 170, run parallel to MD 170 and ascend to ultimately form a "T" intersection with the existing bridge carrying Stoney Run Road over the AMTRAK alignment and MD 170. The ramp would intersect Stoney Run Road approximately 140 feet west of MD 170. The second direct access ramp would provide direct access from Stoney Run Road to southbound MD 170 that would descend directly opposite from the first ramp and would run parallel to southbound MD 170 and tie into the roadway approximately 1000 feet to the south. A signalized intersection would be needed at the ramps intersection with Stoney Run Road. (See Figure 1)

DRAFT- MD 170 Ramps Write-Up
4/2/07

Justification

Traffic Analysis

The MD 170 at Stoney Run Road signalized intersection is projected to operate at Level of Service (LOS) "F" (V/C 1.02) in 2030 without any of the improvements associated with this project. However, LOS "E/F" (V/C 1.00) conditions are actually projected to be reached within the next 5 years. The intersection currently serves as the only access point to the facilities and developments off of Stoney Run Road. This along with major new development slated for the project area, the possible relocation of the Northrop Grumman access gates to Stoney Run Road, and normal regional growth will cause the intersection fail.

The proposed MD 170/Stoney Run southbound ramps eliminate the need for a traffic signal at this location. Only right turns to/from Stoney Run onto northbound MD 170 would remain under this option. Under a no-build condition (no new interchange at Hanover Road and MD 295), the southbound MD 170 left turning movement onto Stoney Run Road, based upon projected 2030 travel demand (1,275 vehicles - AM peak hour), would require a triple left turn lane. Under a build condition all of the left turning vehicles would instead diverge onto Stoney Run Road via the direct access ramp.

Highway Capacity Manual (HCM) analysis shows that with the new interchange at MD 295 all diverge and merge segments along MD 170 and Stoney Run Road operate at LOS C or higher for both AM and PM peak hour conditions in 2030. Critical Lane Volume (CLV) analysis shows the proposed MD 170 southbound ramps at the Stoney Run Road signalized intersection operate at LOS A(B) in 2030. Furthermore, traffic simulation (CORSIM) analysis shows little to no queuing at this location with or without a Right Turn on Red (RTOR), assuming a Right/shared Right-Left southbound ramp lane configuration is in place.

Operational Benefits

Adding the ramps would remove traffic from the intersection of MD 170 and Stoney Run Road as well as remove the need for a traffic signal at the existing intersection. The ramps would enhance access for vehicles and shuttle buses traveling to and from development off of Stoney Run which includes the Consolidated Car Rental Facility, the new MDOT headquarters as well as several parking areas. Vehicles coming from southbound MD 170 to the Consolidated Car Rental Facility would no longer need to wait at the existing traffic signal to make a left turn on the loop ramp onto Stoney Run Road. The ramps may also prevent driver confusion in accessing the facilities since many users are not familiar with the area.

Economic Development

The area around BWI is one the fastest growing areas of Anne Arundel County. Numerous developments, such as Arundel Mills and the BWI Business District, home to 60,000 employees, have led to increased traffic volumes in the area. Several planned

DRAFT- MD 170 Ramps Write-Up
4/2/07

developments in the vicinity of MD 170 and Stoney Run Road will contribute to increased traffic at the existing intersection.

The Stoney Ridge Technology Park Phase II which is planned to be built out by 2010, will add approximately 900,000 square feet of office park space to the immediate vicinity and will generate over 1500 trips in the morning peak hour and almost 1400 trips in evening peak hour. With the MD 170 and Stoney Run Road intersection serving as one of the major access points to the highway/interstate system and destinations beyond, a majority of these trips will utilize the intersection.

Environmental Impacts

The environmental impacts associated with the direct ramps are as follows:

| Resource | Impact |
|------------------------------|--------------|
| Forest (ac.) | 1.1 |
| Streams (lf) | 316 |
| Wetland (ac.) | 0.4 |
| 4f (Hiker/Biker Trail) (ac.) | 0.26 |
| Construction Cost | 12.1 million |

The ramps do not impact the Amtrak railway nor cause any residential displacements. The stream impacts would require the construction of a small pipe culvert to tie into an existing culvert.

Design Concerns

During a recent meeting with the Federal Highway Administration there were concerns raised regarding the sight distance at the top of the ramp as well as the introduction of an additional conflict point at the proposed location of the direct ramps. The MD 295 Study Team met with representatives from the Highway Design Division to address the concerns raised. The sight distance was thoroughly investigated when designing the ramps. The ramps tie in perpendicular to the Stoney Run Road bridge at the highest point on the bridge. The bridge has a 3 foot parapet on both sides; the parapet would not constitute a visual obstruction to the driver since the driver's eye height used for design is 3.5 feet and the individual would therefore be able to look over the parapet to see the incoming traffic. The typical section of Stoney Run Road through the bridge consists of four 12 foot lanes and a 10 foot hiker biker trail on the north side of the bridge. Having the hiker biker trail on the north side of the bridge would improve the sight distance for vehicles on the ramp. Furthermore, the ramps would be controlled by a traffic signal and all left turning vehicles would have to stop until the green phase is given. Plans were presented to representatives of Highway Design and it was concluded that the design presented was considered a safe design to move forward with.

There will be no additional conflict point introduced as a result of adding the ramps. Although a conflict will be introduced at the top of the ramps to control traffic, the traffic signal and conflict point at the intersection of MD 170 and Stoney Run Road would be removed.

DRAFT- MD 170 Ramps Write-Up
4/2/07


Conclusion

The need for the direct ramps for this area is very essential in the near term due to the intersection failing within the next five years which is certainly going to cause an impact on travelers getting to and from BWI Airport and the future Stoney Ridge Technology Park Phase II which is planned to be built out by 2010 and will generate additional traffic near the intersection of MD 170 and Stoney Run Road. In addition, the overall airport related growth activity will pose additional traffic impacts in and around the area as well.

These ramps would allow for a more direct access to development off of Stoney Run Road and would remove a high volume of opposing traffic at the intersection of MD 170 and Stoney Run Road and would eliminate the need for a signal at this intersection.

Therefore, the MD 295 Study Team recommends that the direct access ramps to and from Stoney Run Road at MD 170 be included in the larger MD 295 Project Planning Study because they will help address and alleviate the traffic impact to the area and allow for easy access in and around the BWI facilities especially to those out of town travelers who are not familiar with the area.

DRAFT- MD 170 Ramps Write-Up
4/2/07



SHA
State Highway
Administration

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Maryland Department of Transportation

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

MD 295 Project Planning Study – Scoping Meeting
Page Two

MEMORANDUM

TO: Mr. Raja Veeramachandeni, Director
Office of Planning and
Preliminary Engineering

FROM: Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

DATE: April 7, 2005

SUBJECT: MD 295 Project Planning Study
From MD 100 to I-195
and Hanover Road
from MD 170 to CSX
Anne Arundel and Howard Counties
Project Number AA372A11


RE: MD 295 Scoping Meeting

A MD 295 Scoping Team Meeting was held on March 10, 2005 at the State Highway Administration's Glen Burnie Shop.

The following people were in attendance:

| | | |
|---|---|--|
| Bruce M. Grey Dennis M. Atkins Carmelella Harris Michael Holmes Theresa Christian Lane Victorson Joe Harrison Derek Gunn L'Kiesha Markley Megan Wanzler Anne Elrays | SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD | (410) 545-8500 (410) 545-8520 (410) 545-8522 (410) 545-8509 (410) 545-8697 (410) 545-2950 (410) 545-8526 (410) 545-5642 (410) 545-5641 (410) 545-8563 (410) 545-8562 |
|---|---|--|

My telephone number/toll-free number is _____
 Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free
 Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone 410.545.0300 • www.marylandroads.com



SHA
State Highway
Administration

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

MD 295 Project Planning Study – Scoping Meeting
Page Two

MEMORANDUM

TO: Mr. Raja Veeramachandeni, Director
Office of Planning and
Preliminary Engineering

FROM: Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

DATE: April 7, 2005

SUBJECT: MD 295 Project Planning Study
From MD 100 to I-195
and Hanover Road
from MD 170 to CSX
Anne Arundel and Howard Counties
Project Number AA372A11


RE: MD 295 Scoping Meeting

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| | | |
|---|---|--|
| Bruce M. Grey Dennis M. Atkins Carmelella Harris Michael Holmes Theresa Christian Lane Victorson Joe Harrison Derek Gunn L'Kiesha Markley Megan Wanzler Anne Elrays | SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD | (410) 545-8500 (410) 545-8520 (410) 545-8522 (410) 545-8509 (410) 545-8697 (410) 545-2950 (410) 545-8526 (410) 545-5642 (410) 545-5641 (410) 545-8563 (410) 545-8562 |
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SHA
State Highway
Administration

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

MD 295 Project Planning Study – Scoping Meeting
Page Two

MEMORANDUM

TO: Mr. Raja Veeramachandeni, Director
Office of Planning and
Preliminary Engineering

FROM: Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

DATE: April 7, 2005

SUBJECT: MD 295 Project Planning Study
From MD 100 to I-195
and Hanover Road
from MD 170 to CSX
Anne Arundel and Howard Counties
Project Number AA372A11

RE: MD 295 Scoping Meeting

A MD 295 Scoping Team Meeting was held on March 10, 2005 at the State Highway Administration's Glen Burnie Shop.

The following people were in attendance:

| | | |
|---|---|--|
| Bruce M. Grey Dennis M. Atkins Carmelella Harris Michael Holmes Theresa Christian Lane Victorson Joe Harrison Derek Gunn L'Kiesha Markley Megan Wanzler Anne Elrays | SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD SHA – PPD | (410) 545-8500 (410) 545-8520 (410) 545-8522 (410) 545-8509 (410) 545-8697 (410) 545-2950 (410) 545-8526 (410) 545-5642 (410) 545-5641 (410) 545-8563 (410) 545-8562 |
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MD 295 Project Planning Study – Scoping Meeting
Page Three

PRELIMINARY PURPOSE AND NEED

Ms. Lyn Erickson, regional planner for the State Highway Administration (SHA) began by acquainting the project team with the project area. Using a large scale map, she pointed out nearby landmarks and facilities, such as BWI Airport, the Consolidated Rental Car Facility (CRCF), MD 295, and Hanover Road.

Ms. Erickson then discussed the background of the project. She said that this area has been studied in the past by MDOT, the BWI Access Coordination Group, and Anne Arundel County. The MD 295 Project Planning Study is a part of the Coordinated Transportation Vision, the Highway Needs Inventory (HNI) and is listed in the Anne Arundel County Priority Letter.

The MD 295 Project Planning Study was announced on October 18, 2004 and later re-announced in January, 2005. The project limits shown in the CTP are along MD 295 from I-195 to the north to MD 100 to the south, including the interchanges at both locations. The limits along Hanover Road are from the CSX Railroad Tracks to the west to MD 170, including the connection to MD 170 to the east. A possible interchange on MD 295 at Hanover Road will also be investigated.

Mr. Derek Gunn, travel forecaster with the SHA, then discussed the traffic in the project area. The 2004 Average Daily Traffic (ADT) along MD 295 varies from 96,000 vehicles per day (vpd) at the MD 100 interchange to 90,000 vpd at the I-195 interchange. The ADT on Hanover Road is currently 1,600 vpd and on Stoney Run Road is 12,000 vpd.

The 2030 No-Build ADT projections indicate that MD 295 will carry from 120,000 vehicles per day (vpd) at the MD 100 interchange to 122,000 vpd at the I-195 interchange. The ADT on Hanover Road is projected to be 6,000 vpd and 32,600 vpd on Stoney Run Road. With these projections there would be Level of Service (LOS) of F at the following locations: MD 295 and MD 100 interchange, the MD 295 and I-195 interchange, and the intersection of Stoney Run Road and New Ridge Road. These numbers were achieved using the Baltimore Metropolitan Council's (BMC) Round 6A Model.

PROJECT COMMITMENTS AND CONSTRAINTS

Ms. Harris wanted to clarify that while the project limits do not go all the way to US 1 along Hanover Road, we would study the impacts on the community in this area.

MD 295 Project Planning Study – Scoping Meeting
Page Four

She then explained that this project is on a fast schedule. A commitment has been made to hold the Location/Design Public Hearing within two years. The Alternates Public Workshop is scheduled for December 2005 and the Location/Design Public Hearing is scheduled for January 2007. Ms. Harris expressed that team cooperation will be very important if the schedule is to be kept. It is especially important that team members provide comments on time when reviewing documents.

PLANNED DEVELOPMENT

Howard County

Mr. Ben Pickar, from the Howard County Department of Planning and Zoning, expressed a desire for Hanover Road to connect to Coca-Cola Drive. The area around Coca-Cola Drive is zoned for industrial use. The segment of Hanover Road from US 1 to Coca-Cola Drive could "T" into the new Hanover Road. He noted that the SHA should minimize through traffic on the local, residential roads between US 1 and Coca-Cola Drive. Mr. Pickar noted that we should look at smaller traffic analysis zones (TAZs), to obtain more accurate results in this area.

Another location of concern is where Hanover Road crosses the CSX tracks. This area has been studied by Howard County off and on for safety improvements and SHA should investigate the at grade crossing.

Anne Arundel County

Mr. George Cardwell, from the Anne Arundel County Office of Planning and Zoning, began by pointing out several new facilities in the Hanover Road area that are tied to BWI. The new cargo facility, MDOT headquarters, MAA parking, CRCF, and BWI employee parking are all located in or near the study area.

He added that an interchange on MD 295 at Hanover Road has been listed on the HNI, the Anne Arundel County Priority List, and is included in the Constrained Long Range Plan (CLRP). The interchange, Hanover Road improvements, and the MD 295 improvements should be considered as one project and should go through the National Environmental Policy Act (NEPA) process.

Mr. Cardwell noted that the employment numbers in the project area were 6,205 in the year 2000, but increase to 17,100 by the year 2025. During the same time period, the population in this area only slightly increases, due to most of the area being rezoned for commercial uses. The County's General Development Plan identifies Hanover Road as a four lane, undivided minor arterial. Since that 1997 study, the predicted traffic has increased and now warrants a four lane divided facility. The BWI/Lithium Small Area Plan also recommends the extension of Hanover Road to Stoney Run Road and the Pedestrian/Bicycle Master Plan indicates that Hanover Road should include pedestrian and bicycle facility improvements.

MD 295 Project Planning Study – Scoping Meeting
Page Five

The properties in the study area have been rezoned to commercial uses due to noise from the airport. The MAA has been purchasing land with FAA funds. The county's Hanover Road alignment study found that with the MAA land purchases and the increase in public and private development, possible Hanover Road alignments may be limited in the future. With this in mind, Anne Arundel County made an agreement with Urban Growth (PreFlight), that the County would hold a 60 foot wide right-of-way reservation on the Urban Growth property. This agreement only stands if design of a Hanover Road extension is funded by 2009, and if construction is funded by 2014.

Mr. Cardwell summarized that the project should follow the NEPA process, but the timeliness of study completion should not be ignored. The roadway network needs to be upgraded to reflect the changes in land use and character of the area. Finally, Hanover Road is seen as a major link to local and regional roads.

PRESENTATION OF THE ENVIRONMENTAL INVENTORY

Ms. Theresa Christian, the Environmental Manager, stated that the project is located within the Patapsco River watershed and the surface waters associated with Deep Run and Stony Run within the vicinity of the project areas are classified as Use I waters by the Maryland Department of Natural Resources (DNR). Portions of the project area near Deep Run and Stony Run fall within 100-year floodplains designated by the Federal Emergency Management Agency (FEMA). National Wetlands Inventory (NWI) mapping indicates that palustrine emergent and palustrine forested wetlands are located in the vicinity of Deep Run and Stony Run.

The DNR has indicated that fish species including white perch, yellow perch and herring have been documented spawning near the mouths of Deep Run and Stony Run. These streams also support many resident fish species. No federally listed rare, threatened or endangered animals are within the project area. According to the U.S. Fish and Wildlife Service (FWS), the federally threatened perennial wildflower, swamp pink is found in the vicinity of the project area.

Coordination with the DNR is ongoing to determine whether there are any state listed rare, threatened and endangered plant and animal species within the project area. Ms. Michelle Martin, from MDOT's Office of Planning and Capital Programs, added that during the Corporate Center Drive project, the bog fern was also discovered in the area.

The Patapsco Valley State Park and the BWI Trail are located within the project area. Ms. Christian said that portions of the park adjacent to both MD 295 and Hanover Road could be impacted by roadway improvements with this project. Measures to avoid, minimize, and mitigate parkland impacts will be considered in compliance with Section 4 (f) of the U.S. DOT Act of 1966.

MD 295 Project Planning Study – Scoping Meeting
Page Six

Ms. Christian added that since widening is proposed for the median on MD 295, this portion of the project has low archeological potential. Three recorded archeological sites are adjacent to Hanover Road near the western project terminus and one site is recorded at the eastern project terminus. The large number of recorded sites in the vicinity of Stony Run Road indicates a high potential for undiscovered archeological resources. The project area will be reassessed once the scope has been more fully defined and detailed plans are available. Furthermore, the project area has a moderate to high potential for historic standing structures. The one previously recorded historic standing structure adjacent to MD 295 between MD 100 and I-195, the Charles A. Brauer House, is currently being evaluated for National Register of Historic Places (NRHP) eligibility. No previously recorded historic standing structures are located on or near the Hanover Road segment of the project. However, historic maps, tax parcel records, and aerial photographs indicate there are numerous properties fifty years or older on both sides of Hanover Road. Mainline MD 295 may also be evaluated as a historic resource, due to its direct association with the portion of the Baltimore-Washington Parkway currently listed on the NRHP (between the Washington D.C. line and MD 175).

The proposed action will affect traffic volumes and roadway capacity. Air quality and noise analyses will be completed when detailed alternatives have been developed.

MD 295 is a designated state scenic byway. It is considered the ceremonial entrance into the nation's capital from the north. Coordination with the Maryland Scenic Byways Program is ongoing to determine potential effects of the proposed improvements on the scenic byway. Mr. Terry Maxwell, from the Office of Environmental Design at SHA, added that MD 295 is the ceremonial entrance to Washington and Baltimore. Therefore we should look at aesthetic design standards similar to what the National Park Service has applied to the portion of MD 295 south of MD 175. He suggested that we coordinate with the National Park Service (NPS) and with the Baltimore City Department of Transportation, as they have a gateway project planned for the portion of MD 295 within city limits.

PROJECT PARAMETERS

Ms. Harriet Levine, from the study team, then described the project area. The project will investigate inside widening of MD 295 to six lanes. An interchange at Hanover Road will be considered. The widening of Hanover Road to four lanes will also be considered, as well as an extension of Hanover Road to Stony Run Road. Ms. Martin added that Corporate Center Drive is currently being extend to New Ridge Road and this, as well as the county boundary should be shown on the map.

The design speed will be 65 m.p.h. for MD 295 and will be 50 m.p.h. for Hanover Road. State design standards will be used for the Hanover Road widening and extension from MD 295 to MD 170. County design standards will be used as a minimum from MD 295 west to the project limits.

MD 295 Project Planning Study – Scoping Meeting
Page Seven

As part of the MD 295 widening study, the interchanges at I-195 and MD 100 will be evaluated. Ms. Levine noted that should some kind of improvement be needed at the I-195 interchange, the SHA would need Interstate Access Point Approval (IAPA). Ms. Martin expressed concern that improvements at the Hanover Road/Stoney Run Road connection to MD 170 also be looked at. Ms. Levine replied that the current connection will be evaluated and that should traffic studies indicate the need for further improvements, potential solutions will be considered. She also noted that we would be using a Context Sensitive Solutions (CSS) approach to developing the alternatives.

Ms. Caryn Brookman from the FHWA, asked for clarification of the location of the land reservation held by Anne Arundel County. Mr. Cardwell pointed out the location of the 60 foot right-of-way reservation.

Mr. Nat Coley, from the FHWA, asked if there was any truck traffic on MD 295 southbound, since the NPS owned portion of the parkway has truck restrictions. Ms. Levine replied that the NPS portion of the roadway did not start until south of MD 175. Trucks use both north and southbound MD 295 in the study area.

Mr. Ronald Hopkins, SHA Resident Maintenance Engineer in District 5, discussed several ongoing issues with existing MD 295. As the MD 295 Project Planning Study moves forward, these issues should be considered. There is a drainage issue on MD 295 near I-195. At times, standing water can be found in lane number 2. This is especially a problem during the winter, when this water can freeze. Pine trees are planted along MD 295, as well as in the median. Frequently, the pine trees are uprooted by storms and must be removed. Mr. Hopkins, suggested minimizing the number of pine trees in the area and planting more sturdy trees. Slope failure is also a common problem in this area near the outside guardrails. Mr. Geoff Hall, from the SHA Pavement and Geotechnical Division, warned that the team should design for 3:1 slopes in this area instead of the typical 2:1 slopes.

ADJACENT HIGHWAY PROJECTS

Ms. Lindsay Bobian, a project engineer for the SHA's Office of Highway Design, described the MD 295 widening project north of the project planning study. This project will begin north of the I-195 interchange and continue to just south of the I-695 interchange. MD 295 will be widened on the inside from four lanes to six lanes. This project will not include either the I-195 or the I-695 interchanges. Ms. Bobian noted that this project is funded for construction. The PI review is scheduled for summer of 2005 and the ad date is scheduled for January 2007.

MD 295 Project Planning Study – Scoping Meeting
Page Eight

PUBLIC INVOLVEMENT PROGRAM

Mr. Joe Harrison, from the SHA Public Involvement Unit reviewed the project teams approach to public involvement. A mailing list of property owners, business owners, and anyone who has asked to be included on the list has been created. In December of 2004, an initial mailing was sent to inform the public about the start of the MD 295 Project Planning Study. Newsletters will be sent to the addresses on the mailing list as major milestones are completed. The first newsletter should be sent out this spring and will include a survey. Brochures will also be mailed before public workshops and hearings.

A stakeholders group, comprised of homeowners and businessmen in the area was also created to act as a sounding board. The group has no 'official vote' but should serve as a communication link to the community. The first meeting, held on February 16, 2005, allowed the project team to hear what issues are most important to the community. The most commonly heard issues were the desire to have well designed interchanges, concerns about impacts on local residential roads, and to make sure the project looks at future growth in the area.

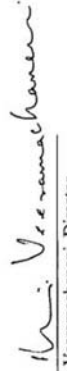
QUESTIONS & COMMENTS


Mr. Abe Skumik, from the District 5 Right of Way Office, explained the importance of coordinating with the appropriate people at the DNR and MAA regarding right-of-way issues. If the project team does not coordinate with these two property owners, then complications may arise later in the process, which easily could make the project run behind schedule.

Ms. Martin suggested that the SHA meet with the BWI Neighbors quarterly meeting. Mr. Harrison replied that this would be best in the fall, as we approach the Public Alternatives Workshop.

Mr. Harvey Gold, from the Anne Arundel County Office of Planning and Zoning, suggested that the SHA add a representative from the police and fire departments to the stakeholders group. These representatives should be involved in the design of the alignment and the maintenance of traffic plan. Ms. Harris replied that the police department had been contacted and the project team will be seeking the input of the police and fire departments. Mr. Harrison agreed that Emergency Services personnel should be involved probably not as part of the Stakeholders Group.

The team was thanked for their participation in the study. Additional team meetings will be scheduled as the project moves forward. If you have any additional questions, please feel free to contact Carneletta Harris, the Project Manager, at 410-545-8522 or via e-mail at charris@sha.state.md.us.


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| <p>MD 295 Project Planning Study – Scoping Meeting Page Nine</p> <p>I concur with the decisions and direction provided at the March 10, 2005 Scoping Meeting for the MD 295 Project Planning Study.</p> <p>CONCURRENCE:</p> <p> _____ Raja Veeramachaneni, Director</p> <p>Enclosures (3) cc: File (w/enclosures) Project Team (w/enclosures) Attendees (w/enclosures) Mr. Greg Welker (w/enclosures)</p> <p style="text-align: right;">4/7/05 Date</p> | |
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Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Robert L. Ehrlich, Jr., Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation



By

MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmeletta Harris
Project Manager
Project Planning Division

DATE: July 12, 2005

RE: MD 295 (Baltimore Washington Parkway) from MD 100 to I-195 and
Hanover Road from Coca Cola Drive to MD 170 (Aviation Blvd.)
Purpose and Need Field Meeting – June 10, 2005
Meeting Summary

Introduction

A Purpose and Need Field Review meeting for the MD 295/Hanover Road project was held on June 10, 2005 at the Maryland Department of Transportation (MDOT) headquarters in Hanover, Maryland. The purpose of the meeting was to discuss the project's draft Purpose and Need, receive informal agency comments, discuss various project issues, and conduct a site visit. Attached within are copies of project documents distributed at the meeting.

The following individuals were in attendance:

| Name | Office | Phone |
|-------------------|---------|--------------------|
| Carmeletta Harris | SHA-PPD | 410-545-8522 |
| Ruel Manuel | SHA-PPD | 410-545-8545 |
| Michael Holmes | SHA-PPD | 410-545-8509 |
| Theresa Christian | SHA-PPD | 410-545-8697 |
| Derek Gunn | SHA-PPD | 410-545-5642 |
| Steve Elinsky | USACE | 410-962-4503 |
| Bill Shultz | USFWS | 410-573-4586 |
| Bala Akundi | BMC | 410-732-0500 x1019 |

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MD 295 (Baltimore Washington Parkway) from MD 100 to I-195 and
Hanover Road from Coca Cola Drive to MD 170 (Aviation Blvd.)
Purpose and Need Field Meeting – June 10, 2005
Page Two

Kiman Choi MDP 410-767-8876
Bihui Xu MDP 410-767-4567
Alvaro Sifuentes Jacobs 410-837-5840
Eric Almquist A.D. Marble 410-902-1421

Summary

The project Manager, Ms. Carmeletta Harris, began the meeting with a brief round table introduction of individuals in attendance. Ms. Harris thanked those persons in attendance then formally began the meeting with an overview of the project limits. The project consists of mainline widening (utilizing the median) of MD 295 (Baltimore Washington Parkway), from south of the MD 100 interchange to north of the I-195 to tie in with a project currently under development in highway design for MD 295 between I-195 and I-695. Improvements are also proposed for Hanover Road, a county roadway, from Coca Cola Drive at the west end of the study area in Howard County, to MD 170 (Aviation Boulevard) at the east end in Anne Arundel County.

The project Environmental Manager, Ms. Theresa Christian, discussed the environmental concerns within the study area and noted the presence of wetlands and 100-year floodplains in the vicinity of Deep Run and Stony Run. Deep Run and Stony Run support numerous fish species and white perch, yellow perch and herring have been documented spawning near the mouths of these two streams. Ms. Christian indicated that the federally threatened perennial wildflower, swamp pink is known to exist within the study area. In addition, state-listed rare plants such as butternut and giant cane, threatened plants such as bog fern, and endangered plants such as clammyweed could potentially occur within the project area. It was noted that MD 295 is a State Scenic Byway, and that the portion of mainline MD 295 within the project limits is not owned by the National Park Service.

The U.S. Fish and Wildlife Service representative, Mr. Bill Schultz, noted the potential of Section 4(f) issues relating to a portion of the Patuxent Valley State Park that is within the study area in the vicinity of Deep Run. Mr. Steve Elinsky, representing the U.S. Army Corps of Engineers, inquired as to when the Jurisdictional Determination (JD) would take place and suggested that the Maryland State Highway Administration (SHA) contact Straughan Environmental Services for information related to a prior JD completed in the study area. Mr. Elinsky added that we could use that JD since it was completed recently and approved by the U.S. Army Corps of Engineers. However, this JD does not cover the whole project planning study area but only an area along Stony Run Road over Stony Run.

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| <p>MD 295 (Baltimore Washington Parkway) from MD 100 to I-195 and Hanover Road from Coca Cola Drive to MD 170 (Aviation Blvd.) Purpose and Need Field Meeting – June 10, 2005 Page Three</p> <p>Mr. Eric Almquist added that the rest of the JD for the study area would be completed at a later date after Stage 1 was complete. Mr. Elinsky mentioned that because this project had such a defined footprint (median widening along MD 295, improvements to Hanover Road and a possible interchange at MD 295 and Hanover Road) we could move the JD for an earlier date. This would enable the project team to refine their wetland impacts before going into a public workshop. A question also was asked regarding a preliminary "ball park (estimate)" of impacts. It was noted that no quantified impacts are available at this time, because conceptual alternatives had not yet been developed. The purpose of the next agency field review will be to discuss the conceptual alternatives. Mr. Elinsky also queried about the possible type of environmental documentation; Ms. Christian noted that it would likely be a Draft Environmental Impact Statement/Section 4(f) Evaluation (DEIS/4(f)). Mr. Elinsky also emphasized that when advertising for the Location/Design Public Hearing, to please coordinate with U.S. Army Corps to obtain their write-up.</p> <p>No further questions were asked and the group proceeded to SHA vans provided for the site visit. Safety vests were provided and the first stop occurred at Hanover Road over Deep Run.</p> <p><u>Hanover Road over Deep Run</u></p> <p>Hanover Road over Deep Run is a single span two lane (one lane each direction) structure (bridge). It was noted that widening of the bridge would be required for widening of Hanover Road. Overhead utility lines are present on the north side of the roadway. A sewer line is also present at the upstream side of the bridge (south side). Mr. Elinsky inquired about the span of the bridge. The bridge was estimated to be 60' in length; that length is to be verified.</p> <p><u>Hanover Road at Coca-Cola Drive</u></p> <p>A brief stop occurred at Coca-Cola Drive to show the project western limits and where the proposed improvements of Hanover Road would terminate. Coca-Cola Drive at the time of the site visit was still under construction.</p> <p><u>MD 295</u></p> <p>A rolling tour of MD 295 started at the southern terminus of the project limits. The team noted the existing six lane facility transitions into a four lane facility south of the MD 295/MD 100 interchange. The proposed improvements along MD 295 would be widening from four to six lanes utilizing the median. MD 295 over Hanover Road is a dual structure and any widening along at MD 295 would require widening/or complete replacement of the existing structures.</p> | <p>MD 295 (Baltimore Washington Parkway) from MD 100 to I-195 and Hanover Road from Coca Cola Drive to MD 170 (Aviation Blvd.) Purpose and Need Field Meeting – June 10, 2005 Page Four</p> <p><u>Stoney Run Road over Stoney Run</u></p> <p>A stop was made at Stoney Run Road over Stoney Run. The bridge is a relatively new single span structure, one lane in each direction with very wide shoulders. Any widening of Stoney Run Road would not require any geometric changes to the bridge.</p> <p><u>Stoney Run Road at PreFlight Parking Facility</u></p> <p>The last stop of the site visit occurred at the PreFlight parking facility. The parking facility is located at the intersection of Stoney Run Road and Old Stoney Run. The proposed "missing roadway link" between Hanover Road and Stoney Run Road would most likely occur in this area. A property fence prohibited participants from walking along the proposed "missing roadway link" alignment.</p> <p>The meeting officially adjourned at the parking facility. Agency representatives were driven back to their cars at the MDOT facility.</p> <p><u>Next Steps</u></p> <p>Alternatives Field Review, time and location to be announced.</p> <p><u>Follow-up Items:</u></p> <p>Question: What is the span length of structure carrying Hanover Road over Deep Run? Response: Hanover Road over Deep Run is owned by Anne Arundel County DPW. The bridge span is approximately 62'-5" ±, out-to-out dimension is 32'-0" ±. The bridge was constructed in 1958 (source: Anne Arundel County DPW, via George Cardwell).</p> <p>If you have any questions or require further information regarding this meeting, please contact Carmeletha Harris, Project Manager, at 410-545-8522 or Ruel Manuel, at 410-545-8509.</p> <p>Attachments (2) cc: Attendees</p> |
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SHA
State Highway
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Maryland Department of Transportation

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Robert L. Phangas, Secretary
Neil J. Pedersen, Administrator

RECEIVED
October 12, 2005

MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmeletta Harris
Project Manager
Project Planning Division

DATE: December 7, 2005

RE: MD 295 (Baltimore Washington Parkway) from MD 100 to I-195 and
Hanover Road from High Tech Drive to MD 170 (Aviation Blvd.)
Conceptual Alternatives Agency Field Meeting – October 12, 2005
Meeting Summary

Introduction

A Conceptual Alternatives Agency Field Meeting for the MD 295/Hanover Road project was held on October 12, 2005 at the Maryland Department of Transportation (MDOT) headquarters in Hanover, Maryland. The purpose of the meeting was to discuss the project's conceptual alternatives, receive informal agency comments, discuss various project issues, and conduct a site visit. Attached within are copies of project documents distributed at the meeting.

The following individuals were in attendance:

| Name | Office | Phone |
|---------------------------|---------------------|--------------|
| Carmeletta Harris | SHA-PPD | 410-545-8522 |
| Ruel Manuel | SHA-PPD | 410-545-8545 |
| Jacqueline Schrenker-Case | SHA-PPD | 410-545-8517 |
| Theresa Christian | SHA-PPD | 410-545-8697 |
| Melissa Hess | SHA-PPD | 410-545-5560 |
| Carol Ebricht | SHA-PPD | 410-545-2879 |
| L'Kiesha Markley | SHA-PPD | 410-545-5641 |
| Dennis Atkins | SHA-PPD | 410-545-8520 |
| John Keene | Anne Arundel County | 410-222-7317 |
| Robin Bowie | MAA | 410-859-7103 |

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MD 295 Conceptual Alternatives Field Meeting
Page Two

| | | |
|---------------------------|-------------|--------------|
| Barbara Rudnick | EPA | 215-814-3322 |
| Steve Elinsky | USACE | 410-962-4503 |
| Bill Shultz | USFWS | 410-573-4586 |
| Caryn Brookman | FHWA | 410-779-7146 |
| Kelly Wade | FHWA | 410-779-7141 |
| Esther J. Strawder-Payton | FHWA | 410-779-7152 |
| Harriet Levine | Jacobs | 410-837-5840 |
| Alvaro Sifuentes | Jacobs | 410-837-5840 |
| Jessica Klinefelter | A.D. Marble | 410-902-1421 |

Summary

The Project Manager, Ms. Carmeletta Harris, began the meeting with a brief round-table introduction of individuals in attendance. Ms. Harris thanked those persons in attendance and then formally began the meeting with a project update.

Project Update

Mr. Ruel Manuel, Project Engineer, provided the project update. Mr. Manuel reminded the group that the project is on a fast track two-year schedule. The Purpose and Need document has received the required agency concurrence and is now complete. Concurrence was obtained from the Federal Highway Administration (FHWA), the U.S. Army Corps of Engineers (USACE), the Environmental Protection Agency (EPA), and the U.S. Fish and Wildlife Service (USFWS). All comments received regarding the Purpose and Need have been addressed.

Mr. Manuel informed the group that the Project Team is now concentrating its efforts on the upcoming Alternates Public Workshop, tentatively scheduled for Wednesday, December 7, 2005 at the Lindale Middle School in Linthicum, MD (Note: The workshop was formally scheduled for December 15, 2005 at the same location). Ms. Harris added that the Project Team met with the Stakeholders group on October 11, 2005. The conceptual alternatives were presented to the Stakeholders and there were follow-up items to be addressed; overall the meeting went well. Ms. Caryn Brookman (FHWA) indicated that the agency group would like a copy of the Stakeholders meeting minutes. As a **follow-up item**, the Stakeholders meeting minutes will be distributed to the agency group as an attachment to these minutes.

Review of Environmental Features and Secondary and Cumulative Effects Analysis (SCEA) Scope

The project's Environmental Manager, Ms. Theresa Christian, reviewed the environmental features of the project and noted the presence of wetlands and 100-year floodplains in the vicinity of Deep Run and Stony Run, the two streams located within the study area. Deep Run and Stony Run support numerous fish species; white perch, yellow perch and herring have been documented spawning near the mouths of these two streams. Ms. Christian indicated that the federally threatened perennial wildflower, swamp pink, is known to exist within the study area. In addition, state-listed rare plants such as butternut and giant cane, threatened plants such as bog fern, and endangered plants such as clammyweed could potentially occur within the project area.

It was noted that MD 295 is a State Scenic Byway, and that the portion of mainline MD 295 within the project limits is not owned by the National Park Service. Ms. Christian indicated the project area has a low potential for historic standing structures; this was verified by Ms. Melissa Hess, the project's Architectural Historian. The MD 295 portion of the study area has low archeological potential, but there is high archeological potential for undisturbed areas in the vicinity of Hanover Road. As part of Environmental Justice requirements, no individuals below the poverty level have been identified in the project area but there is potential for minority populations.

Ms. Jessica Klinefelter (A.D. Marble) provided the Secondary and Cumulative Effects Analysis (SCEA) discussion. Ms. Klinefelter presented to the group the SCEA scope and the different boundaries which made up the overall SCEA boundary. The SCEA study time frame was set from 1970 to 2030 (the project's design year). A question was raised as to why 1970 was selected. Ms. Klinefelter noted that 1970 was selected based on population growth and major developments in the area. There was a change in ownership of the Baltimore/Washington International Thurgood Marshall Airport (BWI) airport (1972), the Baltimore Harbor Tunnel was completed in 1957, the I-695 beltway in 1962, Francis Scott Key Bridge in 1977 and the Fort McHenry Tunnel in 1985.

Conceptual Alternatives

Mr. Alvaro Sifuentes (Jacobs) provided an overview of the no-build and build alternatives. Mr. Sifuentes explained that all build alternatives have two commonalities: mainline widening of MD 295 (Baltimore Washington Parkway) and widening of Hanover Road.

MD 295 mainline widening is proposed from south of the MD 100 interchange to north of I-195 interchange where it would tie in with SHA's highway design project (currently ahead of this project). Mr. Sifuentes noted that the proposed widening would add an additional lane in each direction, widening the roadway to three lanes with 10-foot wide inside shoulders in each direction. The widening would occur in the median.

Mr. Steve Elinsky (USACE) questioned whether the 10-foot shoulders were consistent with AASHTO standards. Mr. Sifuentes noted that the 10-foot shoulders were consistent with AASHTO standards and added that the typical section is consistent with the proposed typical section for the MD 295 project north of I-195. Mr. Bill Shultz (USFWS) asked the group why the two projects were not combined. Ms. Harriet Levine noted that MD 295 from I-195 to the I-695 interchange is already failing and there is an immediate need to upgrade the roadway now, whereas the need for MD 295 from MD 100 to I-195 is in the future. Ms. Levine added that a Logical Termini Segmentation Paper was submitted and approved by FHWA. A FHWA representative asked the group whether the Ridge Road overpass over MD 295 would require any modifications to accommodate the mainline widening. Mr. Sifuentes indicated the Ridge Road bridge over northbound and southbound MD 295 spans 60-feet each and will not require any modifications.

Mr. Sifuentes described the proposed widening for Hanover Road. All build alternatives propose to upgrade Hanover Road from an open section (no curbs and gutter) two lane roadway (one lane in each direction) to a closed section (with curbs and gutter) four lane divided roadway (two lanes in each direction). The proposed roadway section is composed of 16-foot wide bicycle-compatible outside travel lanes and 12-foot wide inside travel lanes. The eastbound and westbound traffic is separated by a 20-foot wide landscaped median. Five-foot wide sidewalks are also proposed along both sides of the roadway.

Mr. Elinsky questioned the justification for the sidewalks. Mr. Sifuentes noted that the SHA requires five-foot wide sidewalks for all new closed section roadways. Mr. Elinsky countered and questioned the group about the rationale for the 20-foot wide median. Mr. Sifuentes noted that it is an SHA standard which allows for turn lanes and appropriate offsets to be cut into the median while maintaining a sufficient remaining width to meet the Americans with Disabilities Act (ADA) requirements. Mr. Elinsky inquired about the roadway design speed and whether there will be trees in the median. Mr. Sifuentes noted that the design speed is 50 miles per hour and the 20-foot wide median will be landscaped. Mr. Elinsky noted that there are parkland areas (Section 4f resources) to the south and wetlands to the north along Hanover Road near MD 295. Mr. Elinsky suggested reducing the lane widths and combining the trail and sidewalks. Ms. Harris noted that the same concern regarding the roadway cross section and bicycle compatible lanes was brought up at the stakeholders' group meeting. As a **follow-up item**, the team will make available SHA's policy and other pertinent information found regarding bicycle compatible travel lanes.

MD 295 Conceptual Alternatives Field Meeting
Page Five

A FHWA representative also suggested to consider guardrail separated travel lanes instead of a 20-foot wide landscaped median in areas between intersections where there are sensitive resources. The team said that they would explore this issue further during the development of detailed alternatives in Stage II. Ms. Caryn Brookman (FHWA) suggested boardwalk areas for trails within wetland boundaries. Ms. Brookman added that there are new 4(f) regulations that discuss the issue of adding trails on park property; she mentioned that the trail would not be considered an impact to the park under these new regulations.

Mr. Sifuentes indicated the build alternatives would improve Hanover Road from High Tech Drive to the west to Old Stoney Run Road to the east. The existing approach to the at-grade railroad crossing to the west would be improved; however the crossing would remain at its current location as an at-grade crossing.

There are two options for the proposed Hanover Road alignment: the Hanover Road North Option and the Hanover Road South Option. The only difference between the two options is the location of the Hanover Road and Ridge Road intersection. The Hanover Road North Option follows the existing roadway alignment while the Hanover Road South Option proposes to minimize the number of horizontal curves and shifts the Hanover Road and Ridge Road intersection 150-feet to the south of the existing Hanover Road and Ridge Road intersection. Mr. Elinsky asked the group if there are any safety concerns with the Hanover Road North option. Mr. Sifuentes indicated there are no safety concerns with either option.

Interchange Alternatives Alternative 2 – Partial Cloverleaf Interchange

Mr. Sifuentes noted that the mainline widening of MD 295 and Hanover Road is included in all build alternatives. Alternative 2 is a Partial Cloverleaf Interchange. The interchange uses loop ramps to accommodate access onto MD 295. Mr. Sifuentes indicated that Alternative 2 has the most impact of all the alternatives. Mr. Elinsky asked if the impacts were available and quantified. Mr. Sifuentes noted that impacts were being worked on and added that an impact matrix will be provided with the brochure and at the workshop.

Alternative 3 – Compressed Diamond Interchange

Alternative 3 proposes a Compressed Diamond Interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at a signalized intersection on either side of MD 295. It was suggested to the team to tighten the ramps to minimize impacts. During Stage II the team will look for opportunities to reduce impacts by adjusting ramps and other measures.

MD 295 Conceptual Alternatives Field Meeting
Page Six

Mr. Elinsky noted that the alternatives presented thus far are unfavorable in terms of the associated environmental impacts. Mr. Elinsky noted that Alternative 5 has far more wetland impacts than parkland impacts. He noted that the team must balance the impacts between the parkland and the wetlands.

Alternative 4 – Single-Point Urban Diamond Interchange

Alternative 4 proposes a Single-Point Urban Interchange (SPUI). While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below the bridge (MD 295), allowing opposing left turning movements to occur simultaneously. Mr. Sifuentes noted that SPUI's main disadvantage is the longer bridge span; the overall cost however would be less than Alternative 2 – Partial Cloverleaf Interchange. Mr. Elinsky suggested that the Project Team adjust the ramp geometry in the northeast quadrant, shift Hanover Road to the south or tighten up the ramp to balance the impacts between the parkland and the wetlands.

Mr. Shultz (USFWS) inquired about the area in the southeast quadrant. Ms. Robin Bowie (Maryland Aviation Administration, MAA) indicated that the area in the southeast quadrant of the proposed interchange is MAA and private properties. Ms. Bowie indicated that MAA currently owns a number of parcels in the study area. Ms. Bowie noted that much of the land owned by MAA was paid for using federal funds. Currently, the MAA has plans to preserve lands in the northeast quadrant for mitigation purposes. Mr. Shultz requested an overlay of MAA owned lands be shown and made available.

Alternative 5 – Relocated Hanover Road with Compressed Diamond Interchange

The last alternative presented was Alternative 5, Relocated Hanover Road with a Compressed Diamond Interchange. Alternative 5 relocates Hanover Road to the north in order to keep continuous traffic movement along existing Hanover Road during construction if a temporary roadway closure of Hanover Road during construction is not feasible.

Ms. Brookman (FHWA) inquired whether a Partial Interchange or no interchange was looked at to minimize impacts to the park and wetlands. Ms. Levine indicated that a no-interchange option does not meet the Purpose and Need statement and that a Partial Interchange has not been investigated. A partial interchange option will be discussed as part of the Section 4(f) documentation for the project.

No further questions were asked; the group recessed for lunch and arranged to meet at a parking area at the intersection of Hanover and Race Road for the field review portion of the meeting.

MD 295 Conceptual Alternatives Field Meeting
Page Seven

Field Review

The following individuals participated in the field review:

| | |
|---------------------------|---------|
| Steve Elinsky | USACE |
| Barbara Rudnick | EPA |
| Bill Shultz | USFWS |
| Carmelella Harris | SHA-PPD |
| Ruel Manuel | SHA-PPD |
| Jacqueline Schrenker-Case | SHA-PPD |
| Theresa Christian | SHA-PPD |
| Harriet Levine | Jacobs |
| Alvaro Sifuentes | Jacobs |

Safety vests were provided and the group proceeded to the proposed interchange location. The group made a visual survey of the proposed interchange southwest quadrant location; the group also explored the northwest and northeast quadrant.

At the northwest quadrant, a small pool of standing water was found. The pool of water is believed to be located inside the proposed loop ramp of Alternative 2. There was a stream west of and parallel to the MD 295 southbound roadway. The stream channel was approximately 4' ± wide x 3' ± deep, approximately 6" ± of water flowed from south to north. Mr. Elinsky noted that the entire "pie" should be delineated.

At the northeast quadrant, there was a stream north of and parallel to Hanover Road. The stream had trash debris such as disposed-of lawnmower parts. A stream east of and parallel to northbound MD 295 was also found. There was a man-made trail leading to a large pool of water east of MD 295 deep into the woods. Mr. Sifuentes noted that the pool of water is shown on the alternatives mapping and added that none of proposed alternatives come close to this wetland area.

During the field review it became apparent that inconsistencies existed between the wetlands shown on the proposed alternatives mapping and actual wetland location/size in both the northwest and northeast quadrants. Arrangements will be made to get a better understanding of the limits of the wetlands shown on the alternatives mapping and revise wetland boundaries if needed. (See Follow-up Items)

Mr. Elinsky noted the agencies prefer the Compressed Diamond Interchange (Alternative 3) above all else shown so far. He noted that the team should investigate using smaller radii for the MD 295 access ramps and to keep away from the streams parallel to MD 295.

MD 295 Conceptual Alternatives Field Meeting
Page Eight

Next Steps

The Alternates Public Workshop for the MD 295 Project Planning Study has been rescheduled for Thursday, December 15, 2005 (4:30 pm – 8:30 pm) at Linstead Middle School located at 415 Andover Road, Lanthicum, MD 21090. In the event of a snow closure, the workshop will be held on Wednesday, January 11, 2006 at 4:30 pm – 8:30 pm.

Follow-up items:

Bike Trail/Bike Usage

The State of Maryland and the Maryland Department of Transportation has a shared vision of making the State of Maryland the best state in the nation for walking and bicycling, and consider these activities as an integral part of a multi-modal approach to transportation. To help achieve these goals, the SHA has adopted a policy to provide for bicycling and walking accommodation as part of all SHA roadway projects where reasonable and feasible. For this particular project, inclusion of sidewalks and bike lane/trail is reasonable to complete the connectivity between the BWI trail and the Patapsco Valley State Park.

The Project Team has included a copy of SHA's policy regarding guidelines for accommodating bicycles and pedestrians on state highways.

Updates:

Following the meeting, SHA sent out a team to the field to take a closer look at the wetlands in the vicinity of the interchange. This effort was made to get a better understanding of the limits of the wetlands that were shown on the alternatives mapping. These revised wetlands boundaries will be shown in the brochure and at the Alternates Public Workshop.

The Project Team discovered some discrepancies with the Patapsco Valley State Park boundary shown on the alternatives mapping. After some discussion with Anne Arundel County and the Department of Natural Resources (DNR) this boundary has been revised to show no parkland in the southwestern quadrant of the interchange between Race Road and MD 295. The new boundary will be shown in the brochure and at the Alternates Public Workshop.

If you have any questions or require further information regarding this meeting, please contact Carmelella Harris, Project Manager, at 410-545-8522.

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| <p>MD 295 Conceptual Alternatives Field Meeting Page Nine</p> <p>Attachments: (Alternatives under Consideration Packet) (SCEA Scope Packet) (Guidelines for Accommodating Bicycles and Pedestrians on State Highways) (MD 295 Stakeholders Meeting No. 2 Minutes)</p> <p>cc: File Attendees Project Team</p> | <p>ALTERNATES CURRENTLY UNDER CONSIDERATION</p> <p>ALTERNATIVE 1 – No-Build</p> <p>No major improvements are proposed under Alternate 1, the No-Build Alternate. Minor short-term improvements would occur as part of normal maintenance and safety projects.</p> <p>ALTERNATIVE 2 – Partial Cloverleaf Interchange</p> <p>This alternate would add a third through lane and a ten foot shoulder along MD 295 from south of the MD 100 interchange to just north of the I-195 interchange. This option proposes a Partial Cloverleaf Interchange at MD 295 and Hanover Road. Hanover Road would be upgraded from a two lane undivided roadway to a four lane divided roadway from Coca-Cola Drive to Old Stoney Run Road. Hanover Road would maintain a 16 foot outside lane to accommodate on road bicyclists, as well as five foot sidewalks.</p> <p>ALTERNATIVE 3 – Compressed Diamond Interchange Option</p> <p>This alternate would add a third through lane and a ten foot shoulder along MD 295 from south of the MD 100 interchange to just north of the I-195 interchange. This option proposes a Compressed Diamond Interchange at MD 295 and Hanover Road. Hanover Road would be upgraded from a two lane undivided roadway to a four lane divided roadway from Coca-Cola Drive to Old Stoney Run Road. Hanover Road would maintain a 16 foot outside lane to accommodate on road bicyclists, as well as five foot sidewalks.</p> <p>ALTERNATIVE 4 – Single-Point Urban Interchange (SPUI)</p> <p>This alternate would add a third through lane and a ten foot shoulder along MD 295 from south of the MD 100 interchange to just north of the I-195 interchange. This option proposes a Single Point Urban Interchange at MD 295 and Hanover Road. Hanover Road would be upgraded from a two lane undivided roadway to a four lane divided roadway from Coca-Cola Drive to Old Stoney Run Road. Hanover Road would maintain a 16 foot outside lane to accommodate on road bicyclists, as well as five foot sidewalks.</p> <p>ALTERNATIVE 5 – Relocated Hanover Road with Compressed Diamond Interchange</p> <p>This alternate would add a third through lane and a ten foot shoulder along MD 295 from south of the MD 100 interchange to just north of the I-195 interchange. This option relocates Hanover Road to the north in order to keep Hanover Road open during construction. A compressed diamond interchange is proposed at MD 295 and Relocated Hanover Road. Hanover Road would be upgraded from a two lane undivided roadway to a four lane divided roadway from Coca-Cola Drive to Old Stoney Run Road. Hanover Road would maintain a 16 foot outside lane to accommodate on road bicyclists, as well as five foot sidewalks.</p> |
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MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmelella T. Harris
Project Manager
Project Planning Division

DATE: December 21, 2005

RE: MD 295 Project Planning Study
Anne Arundel County
Project Number AA572B11

SUBJECT: MD 295 Team Meeting Minutes

On Monday November 14, 2005, a MD 295 Project Planning Study team meeting was held at the Maryland Department of Transportation (MDOT) Headquarters.

The following people were in attendance:

| | | |
|------------------------------|----------------------|----------------|
| Jacqueline T. Schrenker-Case | SHA - PPD | (410) 545-8517 |
| L. Keisha Markley | SHA - PPD | (410) 545-5641 |
| Theresa Christian | SHA - PPD | (410) 545-8697 |
| Jennifer Lozinski | SHA - PPD | (410) 545-8509 |
| Lindsay Bobban | SHA - HDD | (410) 545-8765 |
| Prakash Dave | SHA - HDD | (410) 545-8355 |
| Errol K. Stoute Jr. | SHA - Dist 4 | (410) 321-3117 |
| Martin Cohn | SHA - Dist 5 | (410) 841-1079 |
| Ale Spurnik | SHA - Dist 5 ROW | (410) 841-1067 |
| Brigida Van Doornik | SHA - OOTS TEDD | (410) 787-4037 |
| Geoff Hall | OMT - P&G Division | (410) 321-3113 |
| Caryn Brookman | FHWA | (410) 779-7146 |
| George Cardwell | Anne Arundel Co. OPZ | (410) 222-7432 |
| Alvaro Sifuentes | Jacobs Civil Inc. | (410) 857-5840 |

My telephone number(s) are number is _____
Maryland Relay Service for Impaired Hearing or Speech: 1.800.735.2278 Statewide Toll Free
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone: 410.545.0300 • www.marylandroads.com

MD 295 Team Meeting Minutes
Page Two

Ms. Carmelella Harris began the meeting by welcoming the group. Ms. Harris then proceeded to ask everyone to introduce themselves and indicate the organization they represented. Following introductions, Ms. Harris noted that the purpose of the meeting was to update the team on the proposed alternatives being presented at the Alternates Public Workshop. (Note: The Alternates Public Workshop was scheduled for Thursday, December 15th at Lindale Middle School from 4:30 p.m. to 8:30 p.m. Due to inclement weather that day the meeting was canceled and rescheduled for the snow date on January 11, 2006.)

Ms. Harris requested, as part of the partnering process, that the Partnering for Project Planning Studies Rating form attached to the handouts be completed. Ms. Harris informed the group that all of the project materials including meeting minutes can be found in ProjectWise.

Project Update

Ms. Harris provided an overview and update of the project. She noted that a scoping meeting was held in May of 2005 and two meetings with the Stakeholders were held in February and October of 2005. In addition, two meetings were held with the regulatory agencies, the first to present the project Purpose and Need and the second to introduce the proposed alternatives.

Ms. Harris also talked to the group about the upcoming Alternates Public Workshop at Lindale Middle School. The workshop will start at 4:30 p.m. which is one hour earlier than originally planned because of comments that the study team received from the Stakeholders Group. Ms. Harris then asked Ms. Theresa Christian to give the group an update on the environmental features in the project area.

Ms. Christian informed the group that since the October 2005 meeting with the regulatory agencies, the team has learned that the Patapsco Valley State Park boundary that is shown in several State of Maryland websites is incorrect. After consultation with the Department of Natural Resources (DNR) and Anne Arundel County, it was determined that there are no parklands in the southwestern quadrant of the intersection of MD 295 and Hanover Road between Race Road and MD 295. The wetlands surrounding the proposed interchange were field surveyed after the meeting with the agencies. After the team reviewed the park boundary and wetlands in the vicinity of the interchange, two new alternatives were developed which minimize impacts to the Patapsco Valley State Park and the wetlands around the proposed interchange.

MD 295 Team Meeting Minutes
Page Three

Review of Proposed Alternatives

Mr. Alvaro Sifuentes presented the proposed alternatives that will be shown at the Alternates Public Workshop. Mr. Sifuentes noted that Alternatives 2 through 5 were presented to both the Stakeholders Group members and the regulatory agencies. After the park boundary was adjusted and the wetlands in the surrounding area of the interchange were better defined, the study team developed two additional alternatives (6 and 7) to minimize impacts to environmental features in the area.

Mr. Sifuentes explained that all of the build alternatives have two things in common, the widening of MD 295 and the improvements to Hanover Road. MD 295 will be widened from a four-lane roadway (two through lanes in each direction) to a six-lane roadway with three through lanes in each direction. The additional through lane will be 12-feet wide with a 10-foot shoulder on the inside of MD 295. All of the widening will be done in the median of MD 295 from south of the MD 100 interchange to north of the I-195 interchange. The northern limit of the MD 295 widening will tie into another MD 295 project from I-195 to just south of I-695 that is currently in the design phase of the project development process. That project is scheduled to be advertised in January 2007.

Hanover Road, currently a two lane undivided roadway, would be upgraded to a four-lane divided roadway between High Tech Drive and Old Stoney Run Road. Hanover Road is proposed with a 20-foot median and 16-foot wide outside lanes to accommodate for bicycle compatibility. Hanover Road would also have 12-foot wide inside travel lanes and five-foot sidewalks on both sides of the roadway.

There are two options for the proposed Hanover Road. The only difference between the two options is the location of the Hanover Road and Ridge Road intersection. The North Option follows the existing roadway while the South Option relocates Hanover Road and Ridge Road intersection 300 feet to the south of the existing intersection. The South Option minimizes the number of horizontal curves. Mr. Sifuentes added that the difference between all of the build alternatives is the type of interchange being proposed at MD 295 and Hanover Road.

Alternative 2

Alternative 2 proposes a partial cloverleaf interchange at MD 295 and Hanover Road. This interchange uses loop ramps to accommodate heavy movements onto MD 295. This enables major turning movements to be made by right turn entrances and exits. A disadvantage of the partial cloverleaf interchange is the relatively large right-of-way area needed.

MD 295 Team Meeting Minutes
Page Four

Alternative 3

Alternative 3 proposes a compressed diamond interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at a signalized intersection on either side of MD 295. An advantage of the compressed diamond interchange is that all traffic can enter and leave the major road at relatively high speeds, and the right-of-way needs are small compared to the partial cloverleaf interchange. A disadvantage of the compressed diamond is that due to the two signals longer traffic queues may occur between them.

Alternative 4

Alternative 4 proposes a single point urban interchange (SPUI). While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below the bridge, allowing opposing left turning movements to occur simultaneously. Mr. Sifuentes noted that the advantage of the SPUI is that due to the configuration of the ramps, a major source of traffic conflict is eliminated, increasing overall intersection efficiency and capacity. In addition, the right-of-way needs are small compared to the partial cloverleaf interchange. A disadvantage with the SPUI is the higher construction costs associated with longer bridges and extensive retaining walls.

Alternative 5

Alternative 5 proposes a compressed diamond interchange and the relocation of Hanover Road to the north of the existing alignment. The reason for the relocation of Hanover Road is to keep Hanover Road open throughout the construction period. The advantages and disadvantages of this Alternative are the same as Alternative 3.

Alternative 6

Alternative 6 was developed in response to the new park boundary and wetlands in the vicinity of the proposed interchange. This interchange provides no ramps on the northwestern quadrant of the interchange to minimize impacts to the park and wetlands as well as the residential area in that is also in the quadrant. A loop ramp is introduced on the southwestern quadrant of the interchange to allow movements to and from southbound MD 295. The loop ramp was designed in a horseshoe shape in order to avoid longitudinal impacts to the stream. A one way directional ramp is proposed on the northeast and southeast quadrants to allow movements to and from northbound MD 295. The advantages of this interchange are the reduced impacts to the park, wetlands and residential properties. A disadvantage of this alternative is the relatively large right-of-way is needed.

MD 295 Team Meeting Minutes
Page Five

Ms. Caryn Brookman asked why the one directional ramp for Alternative 2 to northbound MD 295 was further east than the other alternatives. Mr. Sifuentes answered, that in order to prevent backups onto MD 295, a queue length was provided for the loop ramp.

Mr. George Cardwell mentioned that it appeared that the ramps to and from the east had a larger radius than other ramps for the other alternatives. Mr. Sifuentes mentioned that he believed that the design speed for those ramps was 40 mph. Ms. Harris added that those ramps could be looked at for minimization of right-of-way requirements during the next stage of the study. Mr. Cardwell asked why the loop ramp was shaped like a horseshoe. Mr. Sifuentes responded that a constant radius loop ramp was considered, but that such a loop ramp would have caused longitudinal impacts to the stream on the southwest quadrant of the intersection. Therefore, the loop was modified to have two perpendicular stream impacts. Ms. Brookman asked if the agencies had commented on the quality of that stream. Mr. Sifuentes responded that the agencies had not looked at the stream in the field.

Alternative 7

Alternative 7 was also developed in response to the new park and wetlands boundary. Alternative 7 has the same ramp configurations as Alternative 6, no ramps are proposed in the northwest quadrant, a loop ramp is proposed in the southwest quadrant and a one-way directional ramp is being proposed in both the northeast and southeast quadrants. The difference between Alternative 7 and Alternative 6 is that Hanover Road is shifted south of its existing alignment in Alternative 7. The advantage of this interchange is the reduced impacts to the park, wetlands, and residential properties. A disadvantage of this alternative is the relatively large right-of-way area needed as compared to the compressed diamond interchange or single point urban interchange.

After the build alternatives were described, Mr. Sifuentes asked if anybody had any questions.

Mr. Abe Spurnik stated that the building located in the southeast quadrant of the intersection of Hanover Road and Ridge Road appears to be impacted under Alternative 7. He added that from the right-of-way plans he received it showed the limit of disturbance line slightly touching the building. Mr. Sifuentes responded that the building will not be impacted under Alternative 7. The limit of disturbance line was preliminary and adjustments will be made to avoid impacting the building.

MD 295 Team Meeting Minutes
Page Six

Ms. Brookman asked if a compressed diamond interchange was considered with Hanover Road relocated to the south. Mr. Sifuentes responded that, initially a diamond interchange was discussed but dropped because of the impacts to the parkland in the southwest quadrant. Subsequently, it was determined that there are no parklands on the southwestern quadrant of the intersection of MD 295 and Hanover Road between Race Road and MD 295. However, during the field review conducted with the agencies, high quality wetlands were identified in the northwest quadrant. Therefore, the team did not want to propose any ramps in the northwestern quadrant of the interchange.

Mr. Cardwell asked the team if the parcel in the northeastern quadrant of the interchange was owned by the Maryland Aviation Administration (MAA). He added that the site may have been purchased by MAA for mitigation purposes. Mr. Sifuentes responded that he had received an electronic file from MAA showing all the properties they owned and that he would verify ownership of the parcel.

Mr. Martin Cohn asked if Coca Cola Drive connected to MD 100. Mr. Cardwell responded that Coca Cola Drive does connect to MD 100 but he was not sure if it was open to traffic yet.


Mr. Cohn then asked why there were two options for Hanover Road. Mr. Sifuentes responded that the North Option maintains the existing alignment of Hanover Road and that the South Option reduces the number of horizontal curves of the alignment; however, there are more impacts to forested areas with the South Option.

Mr. Cardwell mentioned that the Anne Arundel County Master Plan includes a Class I bikeway along Hanover Road and would prefer to have a bike trail off the road, reducing the typical section of Hanover Road. Ms. Brookman added that the team is going to have to investigate ways to reduce the width of the typical section to minimize impacts to the Patapsco Valley State Park.

Ms. Lindsay Bobian asked what bridges needed to be widened for this project. Mr. Sifuentes responded that the bridge that takes MD 295 over MD 100 needs to be widened as well as the bridge that takes Hanover Road over Deep Run. Mr. Sifuentes added that a design exception would be needed for the bridge that takes Ridge Road over Hanover Road; there is only enough space for a four-foot shoulder on the left side instead of the ten-foot shoulder proposed on the typical section. Ms. Bobian replied that only a four-foot shoulder is required on the left side of the roadway according to American Association of Highway and Transportation Officials (AASHTO), therefore no design exception is needed. A question was raised as to the ownership of the bridge over Deep Run. The bridge is believed to be owned by one either Anne Arundel or Howard County. Mr. Prakash Dave mentioned that any bridge that goes over a stream requires a waterway permit. As a follow-up item, a list of bridges that go over streams will be provided to him.

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| <p>MD 295 Team Meeting Minutes Page Seven</p> <p>Mr. Cardwell asked if the BWI Partnership coordination meeting was going to be held on November 29th and if all of the alternatives will be shown. Ms. Bobian responded that meeting was still tentative and she was waiting on confirmation on the date. Ms. Harris responded that all of the build alternatives will be shown at that meeting.</p> <p>Mr. Cohn asked what the Stakeholders concerns were. Mr. Sifuentes replied that the concerns the Stakeholders expressed included the cut-through traffic in residential areas, the shared bicycle lane, and the relocation of Hanover Road. Mr. Cohn requested that a copy of the Stakeholders meeting minutes be provided to him. As a follow-up item, a copy of the Stakeholders meeting will be attached to the minutes from this team meeting.</p> <p>Ms. Brookman asked if the Federal Aviation Administration (FAA) had received copies of all six build alternatives. Ms. Christian replied that she did not believe the FAA had received copies of all the alternatives. Ms. Brookman requested that copies of all the six build alternatives be sent to the FAA and that if the regulatory agencies had not seen the two new additional alternatives mapping of those should be sent out to them as well.</p> <p>Mr. Cohn asked if roundabouts had been investigated in addition to signalized intersections. Mr. Sifuentes answered that roundabouts were initially investigated but then dropped for two main reasons. First, roundabouts are still fairly new roadway type and would require user familiarity. The location (near a car rental facility) and likely users (visitors/non-local citizens) would likely hinder the proper operation of the roundabouts and more likely lead to driver/user confusion. The second reason why roundabouts were not a viable solution is the sight distance between the two roundabouts is limited. With Hanover Road going under MD 295, the opening under the bridge is limited. Placing Hanover Road over MD 295 to eliminate the sight distance issue is not a viable option as the cost and impacts would be too great.</p> <p>There was a question asked about the alignment of the CSXT railroad and Hanover Road. Mr. Sifuentes explained that presently Hanover Road crosses the CSXT railroad at a skew, this creates a sight distance problem for the approaching cars. The existing at-grade CSXT railroad crossing with Hanover Road would be improved; however, the crossing would remain at its current location as an at-grade crossing.</p> <p>Ms. Harris asked if the Classification Request Letter had been submitted. Ms. Christian replied that it has not been submitted. As a follow-up item, a Classification Request Letter will be submitted to FHWA.</p> <p>Ms. Brookman mentioned that she would provide Ms. Harris with comments on the two new alternatives presented.</p> | <p>MD 295 Team Meeting Minutes Page Eight</p> <p>If you have any questions please feel free to contact Carmelella Harris, the Project Manager, at 410-545-8522 or via e-mail at charris@sha.state.md.us</p> <p>Attachments: (Stakeholders Group Meeting Minutes) File Project Team</p> |
|--|---|


cc: Ms. Lyn Erickson, Regional and Intermodal Planning, SHA
Ms. Carmelella T. Harris, Project Manager, SHA
Mr. Joe Harrison, Public Involvement Unit, SHA
Mr. Douglas H. Simmons, Deputy Administrator for Planning and Engineering, SHA
Mr. Raju Veeramachandeni, Director of Planning and Preliminary Engineering, SHA
Mr. Groszov Welker, District Engineer, SHA



Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Robert L. Phares, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation



MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmeletta T. Harris
Project Manager
Project Planning Division

DATE: March 29, 2005

RE: MD 295 Project Planning Study
Anne Arundel County
Project Number AA372B11

SUBJECT: MD 295 Stakeholders Meeting Minutes

On February 16, 2005, the MD 295 Project Planning Study Team met with the Stakeholders Group members for the first time. The meeting was held at the Maryland Department of Transportation (MDOT) headquarters.

The following people were in attendance:

| | |
|---|---|
| Andrew Bing Rusty Bristow Gene Condon Marie Cook Wayne Dixon Ken Glendinning Linda Greene Catherine Hill Charles Levey Harry Mathews Betsy McMillion Christine O'Connor Mitch Weber | Kramer and Associates Harmans Civic Association Arundel Mills Province Civic Association Harmans Civic Association Linthicum Shipley Improvement Assoc. BWI Business Partnership Community Partnership (NSA) Peach Orchard Civic Association Harmans Civic Association Harwood Park Neighborhood Improvement Greater Elkridge Community Association Heffner and Weber |
|---|---|

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MD 295 Stakeholders Meeting
Page Two

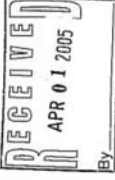
| | | |
|---|--|--|
| Carmeletta Harris Michael Holmes Dennis M. Atkins Joe Harrison Lane Victorson Theresa Christian Lynn Erickson Derek Gunn Lindsay Bobian George Cardwell Ben Pickar Holly Collins Harriet Levine Alvaro Sifuentes | SHA-PPD SHA-PPD SHA-PPD SHA-PPD SHA-PPD SHA-PPD SHA-RIPD SHA-Travel Forecasting SHA- OHD Anne Arundel County Howard County Maryland Aviation Administration Jacobs Civil Inc. Jacobs Civil Inc. | (410) 545-8533 (410) 545-8509 (410) 545-8520 (410) 545-8506 (410) 545-2950 (410) 545-8697 (410) 545-5663 (410) 545-5642 (410) 545-8765 (410) 222-7432 (410) 313-2350 (410) 859-7534 (410) 837-5840 (410) 837-5840 |
|---|--|--|

All members of the Stakeholder Group were given a MD 295 project folder containing several handouts including:

- Meeting Agenda
- Team Members Roles and Responsibilities
- Stakeholder group guidelines
- MD 295 CTP Information
- Project Development Process
- Environmental Considerations
- MD 295 Project Planning Study Area Map
- MD 295 Project Planning Environmental Features Map
- Anne Arundel County Briefing Handout

Mr. Joe Harrison began the meeting by introducing himself to the group and then informed the members that this project is in the very first stage and was just getting off the ground. Mr. Harrison then asked the Stakeholder Group members to introduce themselves and in one sentence describe why this project is of interest to them. Below is a summary of the responses:

- Proximity of the project to the neighborhood/how will the project impact us
- Interested in the reduction/improvement of traffic
- Concerned about how BWI and this project will affect our community
- Interested in the traffic flow to commercial areas
- Represent commercial/development interest with a desire to be a good neighbor and wish to have input on how new traffic patterns will impact the area.



MD 295 Stakeholders Meeting
Page Three

Purpose of the Meeting

Mr. Harrison told the members of the group that the purpose of the meeting was to give the group a set of foundations for future meetings, to present the Project Planning process that the project will have to go through and to have the members tell the study team of any issues in the study area that might be important to the study team.

Mr. Harrison reiterated that this project is just getting started. Each member of the team has a different expertise but they are not experts on the community and that is why the Stakeholders Group was formed. He said that this group supplements our public involvement effort. Although the group is not a legal requirement, we choose to have one because we end up with a better product for the community. The Stakeholder Group will not take a formal vote or make a special recommendation, but will help the team identify community issues before going to the general public. Mr. Harrison then went over the Stakeholder Group guidelines (see attached handout).

Project Background

Ms. Lyn Erickson said that before a project goes into the planning phase, the State Highway Administration (SHA) works with local governments to develop a long term, financially unconstrained document which identifies highway improvements known as the Highway Needs Inventory. The MD 295 Project Planning Study is listed in that document. Ms. Erickson also mentioned that every county submits a priority letter to the Secretary of Transportation. She also stated that this project is in the Anne Arundel County priority letter and the project is in the Baltimore Metropolitan Council's Long Range Plan.

Ms. Erickson said that there are four phases in the project development process: project planning, final design, right of way acquisition and construction. Currently this project is only funded for project planning. She said that the limits of the study are along MD 295 (Baltimore/Washington Parkway) from south of MD 100 to north of I-195, and along Hanover Road from the CSX tracks to MD 170 (Aviation Boulevard). She stated that this project was announced by the Secretary of Transportation on November 18, 2004 and that another project going into the design phase along MD 295 from north of I-195 to south of I-695 was also announced. Ms. Erickson added that a lot of background work was done under the BWI Access Coordination Group, which created a report in 2002 called the Coordinated Transportation Vision for the BWI Region. The MD 295 Project Planning Study was a direct result of the 2003 Long Term Roadway Access Study.

MD 295 Stakeholders Meeting
Page Four

Mr. George Cardwell, Planning Administrator for Anne Arundel County, briefed the members on the history of this project in Anne Arundel County. Mr. Cardwell started by showing the members the extensive development that is occurring and planned for the area. He mentioned the Consolidated Rental Car Facility (CRCF), the new MDT headquarters, the new BWI employee parking and privately owned parking lots. He also mentioned that properties in the area have been rezoned from residential to commercial which generates greater traffic. According to previous studies, the projected traffic on Hanover Road for the year 2025 is consistent with a four lane highway. The County performed a study to identify an alignment for the extension of Hanover Road to MD 170 (Aviation Boulevard). This study has led the County to sign an agreement with Pre-Flight for the reservation of right-of-way through their property. This dedication is contingent on the design being funded by 2009 and construction being funded by 2014 for the potential extension of Hanover Road.

Mr. Ben Pickar, Planning Supervisor for Howard County, briefed the members on the projects that Howard County has in the vicinity of the study. He informed the members that Coca-Cola Drive has now been completed and there are plans for new businesses along the road which will generate more traffic in the area. He also informed the members that the county would like to have the main movement of Hanover Road tie into Coca-Cola Drive with a secondary access to existing Hanover Road to serve all the residential neighborhoods west of the CSX tracks. Mr. Pickar did mention that improvements to Hanover Road have been in the counties Plan since 1990.

Mr. Charles Levay asked the team if we had anybody on the stakeholders group that lived or represented the area south of MD 175. Mr. LeVay also asked why the National Park Service (NPS) was not part of the meeting. Mr. Andrew Bing asked if we could see on a map where all the Stakeholder Group members were from. Mr. Harrison said that it was a good idea and that SHA can provide the members with a map displaying the location of stakeholders at the next meeting.

Mr. Bing also asked if all the new and future development in the area is accounted for in the traffic model. Mr. Gunn answered that all future development was included in the traffic models for the build year which for this project was 2030. **Follow-up:** The traffic model also includes any planned improvements to the NPS portion of the Baltimore/Washington Parkway through the year 2030.

Ms. Linda Green asked how the SHA could have a project on a road that belongs to the NPS. Ms. Erickson responded that north of MD 175, MD 295 is owned by the SHA and that is why this study is being conducted by the SHA. MD 295 is not NPS property through the study area. Although NPS is not part of the Stakeholders Group, the study team will coordinate with them and Baltimore City to make sure that our improvements are consistent with other sections of the Baltimore/Washington Parkway.

MD 295 Stakeholder Meeting
Page Five

Ms. Harriet Levine then talked to the members about the scope of the project planning study. Ms. Levine informed the members that the limits of the study along MD 295 were from south of the MD 100 interchange where the six lane highway drops down to four lanes to north of the I-195 interchange where highway design project will begin. She also mentioned that the study team will look at a possible interchange at MD 295 and Hanover Road with improvements to Hanover Road from the CSX tracks to the Hanover Road/MD 170 interchange. She informed the members that currently Hanover Road ends at Ridge Road and the study will look at extending Hanover Road and tie into Stoney Run Road. Ms. Levine then discussed the environmental features located in the study area. She first mentioned that the environmental inventory has not been completed at this time and the limits on the map might change in the future. A portion of Hanover Road runs through the Patapsco Valley State Park. We have two major streams in our project area, Deep Run and Stoney Run. Ms. Levine also mentioned the possibility of archeological sites in the study area since there have been findings both at the new MDOT headquarters and the CRCF.

Ms. Betsy McMillon asked why the SHA was looking at Hanover Road for a potential interchange and not another road given that no one really uses it now. Ms. Levine answered that due to the spacing between interchanges Hanover Road was a logical place for an interchange along MD 295. She also mentioned to the group that the SHA will be looking at the possibility of an interchange and that it does not mean that an interchange will definitely be built at that location. She added that even if an interchange is needed, it might be an interchange that only allows movements to and from the east or an interchange that will allow for all movements. Further studies will be needed to investigate this and no decision has been made. Ms. Levine also mentioned there are multiple land owners, with lots of zoning changes in the area and that the state has been buying up land because of the noise controls associated with the airport.

Mr. Levay asked the team members to design the new interchange ramps with better design criteria than in previous projects. He mentioned that the ramps for the MD 295 at I-695 interchange are very dangerous and represented a hazard for all drivers. He did not want the same thing to happen at the potential MD 295 at Hanover Road interchange. He noted that the new standards at the Arundel Mills Boulevard interchange seem to operate well. The team will use modern design standards in the development of alternatives for this project.

Mr. Ken Glendenning asked if there are any existing projects that are looking at the MD 295 and I-695 interchange. This interchange seems to have been designed to an old standard. Ms. Erickson replied that currently there is no such project funded, but this may be a future project.

Mr. Mitch Weber asked what would happen to the current Stoney Run Road connection to MD 170. Ms. Levine answered that the study team will look at the existing conditions to determine if any improvements are needed or if the existing interchange could handle the future traffic numbers.

MD 295 Stakeholder Meeting
Page Six

Ms. Carmelella Harris, Project Manager, then talked about the Project Planning Process. She told the Stakeholder Group members that the project planning phase had just begun and there were several milestones that needed to be accomplished in this stage of planning. The first milestone was to develop a Purpose and Need Statement. The next milestones would be to conduct a preliminary environmental inventory and develop preliminary alternatives. She told the members that the goal was to have an Alternatives Public Workshop by the end of this year. She then went on to describe Stages II and III of the project planning phase and that we expect to hold a Location/Design Public Hearing by January 2007. The Stakeholders Group will meet as we approach the various milestones to obtain feedback from the group.

Ms. Theresa Christian, Environmental Manager, went over the National Environmental Policy Act (NEPA) process. She informed the Stakeholder Group members that the SHA will study and investigate three different types of environments; the natural environment, the cultural environment and the socio-economic environment. The natural environment will look into geology/groundwater resources, soils, surface water, floodplains, wetlands, aquatic life and wildlife. The cultural environment will look into historic structures and archaeological sites. The socio-economic environment will look into demographics, community facilities, economic setting, land use, noise and air.

Mr. Levay told the study team that Arundel Mills had performed air quality tests and that these tests did not show satisfactory results. He asked if the SHA was going to conduct air quality tests for the future buildout. Ms. Christian responded that as part of the NEPA process the SHA would conduct air quality tests in several areas of the study at different times of the week and the day, and that these results would then be used to determine the air quality for the future buildout conditions. However, some of the information requires clarification. The SHA will conduct Air Quality analysis for the project to determine if there are any violations of the state and national ambient air quality standards for carbon monoxide (CO). Mr. LeVay and Ms. Marie Cool both asked about how air quality studies are done on the weekend, or during rush hour, etc. Ms. Christian responded that the data would be collected through a 24 hour period. This statement also needs to be clarified. The analysis is based on air quality background levels and the Environmental Protection Agency (EPA) approved model is used to predict any air quality impacts or violations of the CO standards.

Mr. Levay asked how the public will be kept informed of the project. Mr. Harrison replied that we are developing a mailing list comprised of people living in the study area and anyone else who has asked to be placed on the list. Newsletters will be sent to those on the mailing list periodically. Typically, public notices and advertisements of certain milestones, such as Workshops or Hearings, will be mailed to those on the mailing lists and printed in the appropriate newspapers. Mr. Harrison also challenged members of the Stakeholders Group to help the study team get the word out about the project.

MD 295 Stakeholder Meeting
Page Seven

Discussion


Noting that everyone may have different priorities and needs, Mr. Harrison then asked the Stakeholders Group members to list what issues and concerns they had for this project. He later asked for the members to list their top three issues on the back of their name tents. The issues are listed below with the number of people who listed that issue as a top 3 concern:

| Issue to consider | Times listed as top concern |
|--|-----------------------------|
| Preparedness for planned growth | 7 |
| Interchange impacts on residential areas | 6 |
| Good interchange design | 5 |
| Improved access to BWI facilities/coordination with BWI projects | 3 |
| Impacts of a no-build scenario | 3 |
| Increased traffic on local roads | 3 |
| Fire and rescue response | 2 |
| Safety: Hanover Road at the railroad tracks | 2 |
| Speeding along Hanover Road | 2 |
| Impacts of cut through traffic | 1 |
| Flood plain impacts | 1 |
| Possible expansion of NSA | 1 |

Mr. Harrison asked the Stakeholders Group if Wednesday was a convenient night for meetings and there was general agreement. The group also recommended that future meetings start at 6:30 p.m. and adjourn at 8:30 p.m. Ms. Carmelela Harris thanked all the members for attending the meeting and the meeting was adjourned.

If you have any questions please feel free to contact Ms. Carmelela Harris, the Project Manager, at 410-545-8522 or via e-mail at charris@sha.state.md.us

cc: File
Attendees
The Honorable Pamela G. Beidle, Anne Arundel County Councilwoman
The Honorable James E. DeGrange, Sr., Senator



SHA
Division of State Highway Administration
Maryland Department of Transportation

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmeletta T. Harris *Carmeletta T. Harris*
Project Manager
Project Planning Division

DATE: December 6, 2005

RE: MD 295 Project Planning Study
Anne Arundel County
Project Number AA372B11

SUBJECT: Minutes for the MD 295 Stakeholders Meeting No. 2

On Tuesday, October 11, 2005, the second MD 295 Project Planning Study Stakeholders meeting was held at the Maryland Department of Transportation (MDOT) headquarters.

The following people were in attendance:

| | | |
|--------------------|--|----------------|
| Rusty Bristow | Harmans Civic Association | (410) 850-5269 |
| E.A. Canale | Electronic Systems | (410) 850-5269 |
| Gene Condon | Arundel Mills | (410) 765-6097 |
| Marie Cook | Province Civic Association | (410) 551-5288 |
| Wayne Dixon | Harmans Civic Association | (410) 850-0932 |
| Ken Glendenning | Linthicum Shipley Improvement Assoc. | (410) 859-8459 |
| Linda Greene | BWI Business Partnership | (410) 859-1000 |
| Robert Kramer | Kramer and Associates | (410) 268-3035 |
| Charles Levy | Peach Orchard Civic Association | (410) 268-3035 |
| Harry Mathews | Harmans Civic Association | (410) 859-5010 |
| Christine O'Connor | Greater Elkridge Community Association | (410) 379-0514 |
| Mitch Weber | Heffner and Weber | (410) 691-5151 |
| Dan Wilderson, Sr. | Salaried Employees Association | (410) 551-0041 |
| Carmeletta Harris | SHA-PPD | (410) 545-8533 |

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MD 295 Stakeholders Meeting
Page Two

| | | |
|------------------|---------------------------------------|----------------|
| Ruel Manuel | SHA-PPD | (410) 545-8509 |
| Joe Harrison | SHA-PPD | (410) 545-8506 |
| L'Kiesha Markley | SHA-Travel Forecasting | (410) 545-5642 |
| Lindsay Bobian | SHA- OHD | (410) 545-8765 |
| George Cardwell | Anne Arundel County | (410) 222-7432 |
| Ben Pickar | Howard County | (410) 313-2350 |
| Wayne Schuster | Maryland Aviation Administration | (410) 859-7534 |
| Patrick Fleming | Maryland Department of Transportation | (410) 865-1283 |
| Harriet Levine | Jacobs Civil Inc. | (410) 837-5840 |
| Alvaro Sifuentes | Jacobs Civil Inc. | (410) 837-5840 |

All members of the Stakeholders group were given a MD 295 project folder containing several handouts including:

- Meeting Agenda (1 sheet)
- Stakeholders Group Location Map (1 sheet)
- MD 295 and Hanover Road Existing and Proposed Typical Sections (2 sheets)
- Conceptual Alternatives Packet (1 description sheet, 4 Conceptual Build Alternatives/total of 6 sheets)

Mr. Joe Harrison began the meeting by welcoming the group to the second MD 295 Stakeholders meeting. Mr. Harrison then proceeded to ask everyone to introduce themselves and indicate their affiliated association. Following the introductions, Mr. Harrison noted that the purpose of the meeting was to review what the State Highway Administration (SHA) has done so far with this project. He noted that the first Stakeholders meeting centered more on the SHA process and this meeting is the beginning of meaningful dialogue between the Stakeholders group and SHA, to help guide the study team as the project moves forward.

Review of first Stakeholders Meeting

Mr. Harrison provided a brief overview of the first Stakeholders meeting, particularly regarding the group's roles and responsibilities. Mr. Harrison indicated that there was a follow-up item from the previous meeting regarding the location of each individual Stakeholder. A Stakeholders Location Map was created and was included in the project folder. The purpose of the Location Map was to show adequate representation of stakeholders in the project area. No questions were raised regarding the Stakeholders Location Map.

MD 295 Stakeholders Meeting
Page Three

Project Update

Ms. Carmeletha Harris, SHA Project Manager, provided an overview and update of the project. Ms. Harris indicated that the project is nearing the completion of Stage I of the Project Planning Process. Stage I will culminate with the public display of the alternatives developed for the Alternates Public Workshop. Ms. Harris informed the group that the project had received concurrence on the Purpose and Need document, a major Stage I milestone.

Ms. Linda Greene and other stakeholder members indicated that they would like a copy of the Purpose and Need document. As a **follow-up item**, Mr. Harrison noted that the Purpose and Need Document would be attached to these meeting minutes. Ms. Harris continued and indicated that the team has been in coordination with the regulatory agencies. An agency meeting and field review was held on June 10, 2005 and the team will meet with the agencies again on Wednesday, October 12, 2005. Ms. Greene asked who the various agencies were; Ms. Harris noted the agencies involved included the Federal Highway Administration (FHWA), the U.S. Army Corps of Engineers (USACE), the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the Maryland Department of Natural Resources (DNR), the Maryland Department of the Environment (MDE), the Maryland Department of Planning (MDP), and the Metropolitan Planning Organization (MPO), just to name a few.

Review of Conceptual Alternatives

Mr. Alvaro Sifuentes presented the conceptual alternatives. Mr. Sifuentes noted that the alternatives are in the "Conceptual Stage" and are subject to change and revisions.

Alternative 1 – No-Build

Mr. Sifuentes noted that with every SHA planning project, a no-build alternative is always an option and will serve as a baseline for comparison between the no-build and build alternatives. As part of the of the no-build alternative, no major improvements would take place. Normal maintenance and safety improvements would occur and will be done at the district level (regional SHA office). Mr. Sifuentes noted that the no-build alternative does not address, nor is it consistent with, the project's Purpose and Need statement.

MD 295 Stakeholders Meeting
Page Four

Build Alternatives - Similarities

Mr. Sifuentes explained that all of the build alternatives have two things in common; mainline widening of MD 295 (Baltimore Washington Parkway) and widening of Hanover Road.

MD 295 mainline widening is proposed from south of the MD 100 interchange to north of I-195 interchange where it would tie in with SHA's highway design project (currently ahead of this project). Mr. Sifuentes noted that the proposed widening would add one additional lane in each direction from the current configuration of two lanes to three lanes in each direction. The widening would occur in the median to minimize the additional right-of-way needed and to match the proposed typical section of SHA's MD 295 project north of I-195.

All build alternatives propose to upgrade Hanover Road from an open section (no curbs and gutter) two-lane roadway (one lane in each direction, typical section) to a closed section (with curbs and gutter) four-lane divided roadway (two lanes in each direction, typical section). The proposed roadway section is composed of 16-foot wide bicycle compatible outside travel lanes and 12-foot wide inside travel lanes. The eastbound and westbound traffic would be separated by a 20-foot wide landscaped median. Five-foot wide sidewalks are also proposed along both sides of the roadway. (See Typical Roadway Attachment)

The build alternatives would upgrade Hanover Road from High Tech Drive to the west to Old Stoney Run Road to the east. The existing at-grade CSX railroad crossing with Hanover Road would be improved; however, the crossing would remain at its current location as an at-grade crossing.

There are two options for the proposed Hanover Road alignment, the Hanover Road North Option and the Hanover Road South Option. The only difference between the two options is the location of the Hanover Road and Ridge Road intersection. The Hanover Road North Option follows the existing roadway alignment while the Hanover Road South Option proposes to minimize the number of horizontal curves and shifts the Hanover Road and Ridge Road intersection to the south. (See Typical Roadway Attachment)

MD 295 Stakeholders Meeting
Page Five

Following Mr. Sifuentes' description of the proposed improvements to MD 295 and Hanover Road a question and comment dialogued ensued. Mr. Rusty Bristow questioned what the proposed speed limit would be on Hanover Road; Mr. Sifuentes noted that the posted speed limit would be 45 miles per hour (mph), and the design speed would be 50 mph. Mr. Bristow commented and questioned the group whether bicycle traffic is illegal on roadways with a posted speed limit of 45 mph. The team indicated no, and commented that bicycles are actually considered as vehicles in the State of Maryland. Mr. Harrison noted that as a **follow-up item**, the study team will investigate the documentation of bike usage on 45 mph posted roadways.

Ms. Greene asked Mr. Wayne Dixon whether the proposed bike trail is consistent with Hanover's Civic Association proposed hiker-biker trail. Mr. Dixon indicated that the SHA plans and "tie-in" are consistent with their proposed trail.

Mr. Mitch Weber asked why the widened section did not extend to the New Ridge Road/future Corporate Center Drive intersection. Mr. Sifuentes noted that there are environmentally sensitive areas (wetlands) past Stoney Run Road and the agencies would like the Project Team to stay away from those areas. Mr. George Cardwell questioned whether it is possible to improve up to New Ridge Road. Mr. Sifuentes answered that the team was going to investigate the new intersection of Corporate Center Drive/New Ridge Road/Stoney Run Road to determine what improvements would be needed for that new intersection for the build alternatives under consideration.

Ms. Greene directly asked Mr. Cardwell about a crossing study over MD 170 from Stoney Run Road to the Northrup Grumman compound. Mr. Cardwell noted there is no county study regarding an overpass.

A stakeholder member asked the team whether there are any known developments coming into the project area. Mr. Dan Wilderson identified himself and indicated that his organization, the Salaried Employees Association, is looking to develop a piece of property at the intersection of Hanover Road and Ridge Road. Mr. Wilderson indicated that they are currently in negotiations to acquire the property. Ms. Harris noted that the team does not know of any other pending developments coming in the project area. As a **follow-up item**, the team will identify known pending developments coming into the project area.

Ms. Christine O'Connor asked the group whether there are any issues regarding closing the railroad crossing at Hanover Road. Mr. Sifuentes noted that Howard County had investigated the issue of closing the crossing but there have been no resolutions regarding this issue. Regardless of whether the County determines to close the crossing or not, this would not affect the project.

MD 295 Stakeholders Meeting
Page Six

Ms. Greene asked the group whether SHA is up to speed with the efforts being undertaken by the Maryland Aviation Administration (MAA). Mr. Sifuentes indicated yes, and noted that MAA is part of the study team.

Mr. Weber asked the study team whether there are any plans to tie in to the Palapasco Trail. Mr. Sifuentes indicated that the team was not aware of the Palapasco Trail being in the vicinity of the study area; however, this will be investigated to determine if any tie-ins are appropriate with this study.

A stakeholder member asked the team what is the driving force behind this project; another stakeholder suggested that it is the business sector. Ms. Harris concurred and noted that the proposed sections are based on future traffic numbers. The projected numbers are based on existing travel demands and designated land use zoning. Anne Arundel County is also very supportive of this project.

A stakeholder member questioned the team regarding who (what agency) is in charge of the roadway signage. It was noted that signage at New Ridge Road (coming out of the Rental Car Facility) is not as informative or is lacking. Mr. Sifuentes noted that the agency who owns the roadway is in-charge of the signage on that roadway. MD 295 within the project limits is owned by the State of Maryland. Hanover Road is currently owned by the county and questions surrounding its future ownership have not been decided.

A question was asked if the Hanover Road plans are consistent with county standards. Mr. Ben Pickar, Howard County Representative, indicated yes, the design is consistent with county standards.

Alternative 2 – Partial Cloverleaf Interchange

Alternative 2 proposes a Partial Cloverleaf Interchange at MD 295 and Hanover Road. The interchange uses loop ramps to accommodate access onto MD 295.

Alternative 3 - Compressed Diamond Interchange

Alternative 3 proposes a Compressed Diamond Interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at a signalized intersection located on the westbound and eastbound sides of MD 295.

MD 295 Stakeholders Meeting
Page Seven

Mr. Weber asked the Project Team if roundabouts can be used instead of traffic signals. Mr. Sifuentes noted that roundabouts were initially considered; however, they were dropped early in the process for two reasons. First, roundabouts are still a fairly new roadway type and would require user familiarity. The location (near a car rental facility) and likely users (visitors/non-local citizens) would hinder the proper operation of the roundabouts and could lead to driver/user confusion. The second reason why roundabouts are not viable solution is that the sight distance between the two roundabouts would be limited. With Hanover Road going under MD 295, the opening under the bridge is limited. Placing Hanover Road over MD 295 to eliminate the sight distance issue is not a viable option as the cost and impacts would be too great.

Ms. Greene questioned the team about why there is only one peak hour volume for am and one for pm. Ms. Greene noted that the airport produces multiple peak travel periods which coincides with the daily arrival and departure schedule. Ms. Greene suggested that the study team contact MAA regarding peak travel periods. Ms. L'Kiesha Markley, SHA Travel Forecaster, noted that the peak hour volumes presented would capture the airport peak hour traffic. As a **follow-up item**, the team will look into the airport peak travel periods and determine if the airport traffic has an effect above the project peak hours. The team would determine if this would change the projected volumes and or traffic analysis.

A stakeholder participant asked the study team whether the partial cloverleaf ramps can be reconfigured. Mr. Sifuentes noted that because of the environmental constraints, the partial cloverleaf would likely remain where they are as proposed; he noted that the geometry of the ramps can be refined and adjusted as the project progresses. It was also asked if SHA would rather take property from homeowners or parklands. Mr. Harrison explained that SHA is bound by the laws of the National Environmental Policy Act (NEPA) and Section 4(f) of the U.S. Department of Transportation Act of 1966 which dictates that there must be no feasible and prudent alternative to the use of land from parkland before it can be impacted.

Alternative 4 - Single-Point Urban Interchange (SPUI)

Alternative 4 proposes a Single-Point Urban Interchange. While similar to traditional diamond interchanges, the SPUI ramps curve inward and meet at a single traffic signal below the bridge (MD 295), allowing opposing left turning movements to occur simultaneously. Mr. Sifuentes noted that SPUI's main disadvantage is the longer bridge span; the overall cost; however, would be less than Alternative 2 – Partial Cloverleaf Interchange.

MD 295 Stakeholders Meeting
Page Eight

It was suggested that the study team pay extra attention regarding bikeway traffic due to the free right turn movements associated with the Single-Point Urban Interchange. It was noted that transient vehicular traffic from the car rental facility will not expect bicycle traffic. Mr. Sifuentes concurred and indicated that it will be investigated.

A stakeholder member asked a fellow member where the Harman's Civic Association proposed bike trail is located. Ms. Greene and Mr. Dixon indicated that the bike trail will be on New Ridge Road and continue to the Arundel Mills shopping center. The project is funded by the airport and is managed by the civic association.

Mr. Weber suggested a wider landscape buffer outside of the curb line for a better looking boulevard effect. Mr. Weber suggested a ten-foot wide buffer area.

Alternative 5 - Relocated Hanover Road with Compressed Diamond Interchange

The last alternative presented was Alternative 5, Relocated Hanover Road with a Compressed Diamond Interchange. Alternative 5 relocates Hanover Road to the north in order to keep continuous traffic movement along existing Hanover Road during construction; if a temporary roadway closure of Hanover Road for construction is not feasible. A stakeholder member asked what the estimated period of roadway closure is; Mr. Sifuentes answered that Hanover Road would be closed for a short period of time but it was still very early in the process to determine exactly for what period of time closures would be needed.

General Discussions

Stakeholder members asked the Project Team to keep in mind the pros and cons from different points of views (residential, business, and airport users). A pro for one set of individuals may be perceived as a con for another.

Mr. Harrison asked the group how the project can be better presented. Below is a list of suggestions the stakeholders group made:

- Explain the constraints better.
- Show the parkland area in a different shade (differentiate).
- Show existing and proposed bikeways.
- Extend mapping to I-195 and show the airport and MD 100.
- Show in the mapping the location of existing communities.
- Include an impact matrix.
- Get feedback from rental car user(s).
- Advertise with the MD Gazette, the Baltimore Sun and the Howard County Newspaper (Local Papers).

MD 295 Stakeholders Meeting
Page Nine

Next Steps

Ms. Harris indicated that the team will meet with the agencies on Wednesday, October 12th to present the same alternatives that were presented tonight. The **Alternatives Public Workshop** has been **rescheduled to Thursday, December 15, 2005 at the Lindale Middle School**. The workshop will **begin at 4:30 pm and end at 8:30 pm**. The workshop is an informal meeting and no formal presentation will be made. The snow date is set for Wednesday, January 11, 2006 at the same location and time frame. The project brochure will be mailed out about two weeks prior to the workshop.

Ms. Greene and another stakeholder member suggested that the team look into school holiday parties. They have indicated that it is during this time of the year that schools will hold their party and the team might not get the proper attention and attendance.

No more questions were raised; Ms. Harris and Mr. Harrison thanked the group for their participation, the meeting officially adjourned.

Follow-up Items

Pending Developments in the Project Area

The study team does not have any additional information regarding pending developments coming into the project area with the exception of Mr. Dan Wilderson, Sr. of the Salaried Employees Association. Mr. Wilderson's engineer had prior contact with the project team regarding their plans for development.

Airport Peak Travel Periods

The SHA has reviewed traffic count locations within the BWI Airport vicinity in an attempt to answer the question concerning the airport peak period vs. the study peak period. The count locations used for this review were I-195 South of MD 170, MD 170 South of I-695 and MD 170 at the Stoney Run Road ramps taken during 2004/2005. The highest percentage of vehicles on the roadway(s) in the AM/PM is the peak hour, which on average fell between 6am-8am and 4pm-6pm. The count for I-195 South of MD 170, in particular, shows steady traffic (+1200 vehicles in each direction) essentially from 5am to 11pm with a significant increase in vehicles occurring from 6-7 am and 4-5 pm. Although the airport trips are consistent throughout the day, the addition of other local trips (i.e., business, school, shopping, etc.) creates a distinctive increase in traffic resulting in our overall study peak hour.

MD 295 Stakeholders Meeting
Page Ten

Bicycle Usage

The State of Maryland and the Maryland Department of Transportation has a shared vision of making the State of Maryland the best state in the nation for walking and bicycling; and consider these activities as an integral part of a multi-modal approach to transportation. To help achieve these goals, SHA has adopted a policy to provide for bicycling and walking accommodation as part of all roadway projects where reasonable and feasible. For this particular project, inclusion of sidewalks and bike lane/trail is reasonable to complete the connectivity between the BWI trail and the Patapsco Valley State Park. At this point, there are no concrete plans by DNR to extend the trail system in the park into the MD 295 study area.

Whenever bicycling accommodations are provided, there are no limitations on usage based on posted speed limits. On roadways where bicycling accommodations are not provided (no designated bike lane/bike travel on vehicular travel lanes), the Transportation Article of the Annotated Code of Maryland Section 21-1205.1 prohibits the use of bicycles on any roadway where the posted speed limit is more than 50 miles per hour.

The project team has included a copy of SHA's policy regarding guidelines for accommodating bicycles and pedestrians on state highways.

If you have any questions please feel free to contact Carmeletta Harris, the Project Manager, at 410-545-8522 or via e-mail at charris@sha.state.md.us

Attachments: (1 Purpose and Need Document)
(Guidelines for Accommodating Bicycles and Pedestrians on State Highways)
(Typical Roadway)

cc: File

Attendees

Stakeholders Group

The Honorable Pamela G. Beidle, Anne Arundel County Councilwoman

The Honorable James E. DeGrange, Sr., Senator

Mr. James M. Irvin, Director, Department of Public Works, Howard County

From: Carmaletha Harris

Sent: Tuesday, May 30, 2006 4:43 PM

To: Raja Veeramachaneni; Sam Minnitte; Bruce Grey; Gregory Welker

Cc: Dennis Atkins; Michelle Martin; Don Halligan; Joe Harrison Jr; Harriet Levine; Alvaro Sifuentes; Patrick Fleming; George Cardwell (gcardwell@aaacounty.org); Linda Greene; Mitch Weber (mweber@heffnerandweber.com)

Subject: MD 295 Business Coordination Meeting

On Wednesday May 24, 2006 the State Highway Administration (SHA) hosted a meeting with the business community within the MD 295 Project Planning Study area. The meeting was held at the State Highway Administration Headquarters Building in the Project Planning Conference Room 347/348. The following people were in attendance:

Sam Minnitte - MDOT Planning
Patrick Fleming - MDOT
George Cardwell - Anne Arundel County
Jim Patton - Patton Consultants
Mitch Weber - Heffner and Weber
Lou Zagatino - BWI Partnership
Don Halligan - MDOT Planning
Michelle Martin - MDOT Planning and Real Estate
Linda Green - BWI Partnership
Dennis Atkins - SHA Planning
Carmaletha Harris - SHA Planning
Harriet Levine - Jacobs Consultant
Alvaro Sifuentes - Jacobs Consultant

The purpose of the meeting was to meet with the business community to discuss future development and to address any concerns or issues that the business community may have within the MD 295 Project Planning Study.

The meeting began with everyone introducing themselves and indicate the organization they represented. There was discussion regarding the State Highway Development process as well as the general project planning process. It was also mentioned that the next step for the MD 295 project is to receive concurrence on the Alternatives Retained for Detailed Study. The Location Design Public Hearing will be held approximately one year from now in the Spring of 2007. Location and Design Approval(s) are scheduled to be received in early 2008.

Ms. Harris then asked Mr. Mitch Weber if he would like to add anything. Mr. Weber thanked Ms. Harris for having set up the meeting and then mentioned that in light of other projects in the area, the business community needs broader communication with state and local agencies to have a better understanding on all projects in the area. He mentioned several key projects in the area the MD 295 studies, the Green Line extension, the Ridge Road project and the MAA Master Plan which would in some way have an effect on the project planning study. Better communication would lead the different leading agencies to take into consideration design parameters that others are using.

Mr. Minnitte mentioned that MDOT has been asked to come up with an unconstrained 20 year plan for transit needs in the Baltimore – Washington corridor. This report is due in by the end of this year. He added that MDOT will also be looking at the feasibility study for the extension of the Green Line from the Greenbelt Station. This report is due by the Summer of next year 07. Mr. Minnitte added that MDOT has also been looking at the widening of MD 175 leading into Fort Meade and a project for Transit Oriented Development in the Odenton Station and that MDOT has a responsibility to make sure that the public understands everything that is going on in the area.

Ms. Linda Greene mentioned that from the businesses perspective they would like to know some of the key dates for milestones, on each of the projects that are on the books. Mr. Weber added that the MD 295 team should coordinate with Anne Arundel County since Ridge Road might be relocating and tying into Hanover Road at a different location. Ms. Levine asked Mr. Cardwell if he could give an update on what was being planned for Ridge Road.

Mr. Cardwell answered that south of the MAA parking lot, Ridge Road was being converted into a two lane section with shoulders, but that north of Hanover Road there is no active project. He added that there was once talk about realigning Ridge Road and converting it into a two lane section with shoulders but nothing was being looked at as of now.

Ms. Levine added that since the alignment of Ridge Road will not move in the area where proposed Hanover Road is coming in, the Ridge Road project will not affect the MD 295 Planning Study. Mr. Weber mentioned that since Hanover Road would be one of the main entrances to the airport the design of the road should take into consideration issues like signage and lighting to make it a gateway into the area.

Mr. Sifuentes then informed the group on the Alternatives that were being Retained for Detailed Study and the ones that are recommended to be dropped.

Alternatives Recommended to be Dropped

Alternative 2 proposes a partial cloverleaf interchange at MD 295 and Hanover Road. The interchange uses two loop ramps to accommodate access onto MD 295. Ramp to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. This alternative was dropped from further study because the large footprint made it an alternative with very high impacts to both the natural and social environment. This alternative had the greatest number of potential residential displacements, potential wetland impacts, potential park impacts and the greatest number of potential floodplain impacts.

Alternative 5, this Alternative relocates Hanover Road to the north; a compressed diamond interchange is proposed at MD 295 and relocated Hanover Road to the north. Ramps to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. This alternative was dropped from further study because with the relocation of Hanover Road to the north it was the alternative with the highest number of potential impacts to natural resources in the northwest quadrant of the interchange. Alternative 6 avoids impacts to the northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized intersection on Hanover Road. This alternative was dropped from further study because it had the highest construction cost and had more impacts to the natural environment compared to Alternative 7 which proposes the same configuration for the proposed interchange.

Alternative 3 proposes a compressed diamond interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. This alternative was retained for detailed study because it was the alternative with the lowest construction cost, it had the lowest number of residential displacements, same as Alternative 4, it had the lowest number of floodplain impacts, same as Alternative 4.

Hanover Road North Option is being dropped because of its close proximity to the MAA wetland mitigation site north of Hanover Road and also bifurcates a large parcel on the east side of Ridge Road.

Alternatives to be Retained for Further Detailed Study

Alternative 4 proposes a Single Point Urban Interchange (SPUI) at MD 295 and Hanover Road. While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal

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| <p>below the bridge, allowing opposing left turning movements to occur simultaneously. This alternative was retained for detailed study because it had the lowest number of residential displacements, same as Alternative 3, it had the lowest number of floodplain impacts, same as Alternative 3.</p> <p>Alternative 7 relocates Hanover Road to the south and avoids impacts to the northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized on Hanover Road. This alternative was retained for detailed study because it was the alternative with the lowest number of wetland impacts, the lowest number of park impacts and it avoids impacting park and wetlands on the northwest quadrant of the interchange.</p> <p>Alternative 8, the Diverging Diamond Interchange, switches traffic at the ramp terminals, over to the opposite side of the roadway within the interchange. This promotes left-turn movements and eliminates the left turn signal phase improving the interchange's efficiency. This alternative was retained for detailed study because the switch in traffic improves capacity and minimizes the length of the queues which can normally cause failure within a diamond interchange.</p> <p>The Hanover Road South Option is being retained for detailed study because it is less invasive to properties adjacent to Hanover Road.</p> <p>Mr. Sifuentes added that some of the things we will be looking at during the next stage of planning are the intersection of Corporate Center Drive and Stoney Run Road will be upgraded to operate at an acceptable Level of Service. The intersection of Stoney Run Road and the Northrop Grumman entrance will be studied further to determine if the large movement of traffic that is coming from MD 170 and going towards the Car Rental Facility can flow freely without having to stop. A hiker/biker trail will be added to the north side of Hanover Road to accommodate recreational bicyclists that would feel intimidated by riding alongside of cars on the road.</p> <p>Mr. Weber and Mr. Cardwell requested copies of Alternative 8. SHA will provide maps of Alternative 8 to Mr. Weber and Mr. Cardwell.</p> <p>Thanks Carmelella Harris Project Manager Project Planning Division</p> | |
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MEMORANDUM

TO: Mr. Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

FROM: Carmeletta T. Harris
Project Manager
Project Planning Division

DATE: June 8, 20076

RE: MD 295 Project Planning Study
Project Number AA372B11

SUBJECT: MD 295 Stakeholder Group Meeting Minutes - No. 3

On Wednesday, October 25, 2006, the third MD 295 Project Planning Study Stakeholder Group meeting was held in the Richard Trainor Conference Room at the Maryland Department of Transportation (MDOT) headquarters.

The following people were in attendance:

| | | |
|--------------------|--------------------------------------|----------------|
| Christine Bolewski | Pre-Flight | (410) 694-0025 |
| Rusty Bristow | Harmans Civic Association | (410) 850-5269 |
| Ben Cohen | BW1 Business Partnership | (410) 859-1000 |
| Marie Cook | Province Civic Association | (410) 551-5288 |
| Jim Flannery | Continental Realty | (443) 921-4376 |
| Derrick Dallas | Linthicum Shipley Improvement Assoc. | (410) 859-8459 |
| Charles Levay | Peach Orchard Civic Association | (410) 268-3035 |
| Harry Mathews | Harmans Civic Association | (410) 859-5010 |
| Terry McDonnell | Crestwood Improvements Association | (443) 838-3453 |
| Jim Patton | Patton Consultants- Dewey Jordan | (410) 671-0205 |
| Mitch Weber | Heffner and Weber | (410) 691-5151 |
| Dennis Wilderson | Salaried Employees Association | (410) 551-0041 |
| Carmeletta Harris | SHA-PPD | (410) 545-8533 |
| Brett Ripkin | SHA-PPD | (410) 545-8509 |
| Jennifer Rohrer | SHA-PPD | (410) 545-8557 |
| Joe Harrison | SHA-PPD | (410) 545-8506 |

MD 295 Stakeholder Group Meeting
Page 2

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|-------------------|----------------------------------|----------------|
| Victoria Lane | SHA-PPD | (410) 545-2950 |
| Theresa Christian | SHA-PPD | (410) 545-8697 |
| Derek Gunn | SHA-Travel Forecasting | (410) 545-5642 |
| Greg Welker | SHA- District 5 | (410) 841-1001 |
| George Cardwell | Anne Arundel County | (410) 222-7432 |
| Wayne Schuster | Maryland Aviation Administration | (410) 859-7534 |
| Harriet Levine | Jacobs Civil Inc. | (410) 837-5840 |
| Alvaro Sifuentes | Jacobs Civil Inc. | (410) 837-5840 |
| Bryan Townsend | WR&A | (443) 224-1667 |

All members of the Stakeholder Group were given a MD 295 project folder containing several handouts including:

- Meeting Agenda
- Stakeholder Group Guidelines
- Summary of Comments from Alternates Public Workshop
- Alternatives Pros and Cons Chart
- MD 295 Mainline Widening Mapping
- Alternatives Dropped From Detailed Study Mapping - Alts. 2, 5, and 6
- Alternatives Retained For Detailed Study Mapping - Alts. 3, 4, and 7
- New Alternatives Mapping - Alts. 3 Option A, 4 Option A, and 8
- Hanover Road Cross Section

Mr. Joe Harrison began the meeting by welcoming the group to the third MD 295 Stakeholder Group meeting. Mr. Harrison then proceeded to ask everyone to introduce themselves and indicate their affiliated association. Following the introductions, Mr. Harrison noted that the purpose of the meeting was to review what the State Highway Administration (SHA) has done so far with this project. He noted that the second Stakeholder Group meeting took place last October and at that time SHA provided a preview of the alternatives that were going to be presented at the Alternates Public Workshop in January 2006.

Mr. Harrison noted that since the workshop, SHA has received input from the public, regulatory agencies, and local governments. As a result of that input, several of the alternatives have been revised; some have been dropped from consideration and new alternatives have been added. He also noted that the project has reached a milestone in the study process. The project has moved from Stage I to Stage II as a result of receiving concurrence from regulatory agencies on the Alternatives Retained for Detailed Study (ARDS). Mr. Harrison reviewed the agenda items for discussion at the meeting and briefly discussed the Stakeholder Group Guidelines.

Project Update

Ms. Carmeletta Harris, SHA Project Manager, provided an overview of the comments received at the Alternates Public Workshop held on January 11, 2006. As Ms. Harris reviewed the comments on the alternatives, she noted the number of comments for and against each alternative. She also stated that there were comments concerning access to properties fronting on Hanover Road, access during construction and the overall impacts to residential properties.

MD 295 Stakeholder Group Meeting
Page 3

Ms. Harris noted that there were comments concerning increased traffic on Hanover Road and cut-through traffic to the airport. She stated that there was a request to update the project mapping for which the study team has done.

Ms. Harris explained that a meeting was held with Senator DeGrange to discuss the Alternatives Retained for Detailed Study (ARDS) and allow him to provide feedback. Ms. Harris noted that the Senator made several suggestions and that some of them have been incorporated into the ARDS. Mr. Harrison opened up the meeting for questions; there were none at that point.

Nearby Projects

Mr. Bryan Townsend, of Whitman, Requardt, and Associates, provided an update on the MD 295 widening project from I-695 to I-195 currently in Highway Design at SHA. Mr. Townsend described that the project will widen MD 295 to 3 lanes in each direction with all the widening occurring entirely in the median. Mr. Townsend informed the group that the project is currently scheduled to advertise for contractors in January 2007 and he anticipates construction beginning the summer of 2007.

Ms. Terry McDonald asked if Mr. Townsend's project was an extension of the widening of MD 295 north of Hammonds Ferry Road. Mr. Townsend said that it was. Mr. Mitch Weber asked if improvements to West Nursery Road will be a part of the I-695 to I-195 project. Mr. Townsend said that improvements to West Nursery Road are not a part of the project.

Mr. Wayne Schuster, from the Maryland Aviation Administration (MAA), provided an update on planning efforts at the Baltimore/Washington International Thurgood Marshall Airport (BWI). Mr. Schuster clarified that at this point, MAA is not updating the Airport Master Plan, but rather performing a long range needs assessment. He stated that the current master plan was developed in 1987 and is still in use. He also noted that almost all of the capital projects from that plan have been completed with the notable exception of a new runway that has been called for since that time. Mr. Schuster explained that due to changes in demand and use of the airport the need for building the new runway has not been a priority.

Mr. Schuster explained that MAA is currently performing a long range needs assessment for the airport. He noted that they are looking at what facilities they have currently and what the need for new facilities will be in the future. He noted that this assessment could lead to an update of the Airport Master Plan which would be a public process, and MAA would be looking for stakeholder participation at that time.

Next, Mr. George Cardwell, from the Anne Arundel County Office of Planning, provided an update on Anne Arundel County efforts and projects in the nearby area. Mr. Cardwell noted that the county is working with MAA to release some property to make improvements along Ridge Road from Stoney Run Road to MD 176. He noted that a new general development plan could be created and implemented depending on the new administration. Mr. Cardwell also noted that Anne Arundel County has been focusing on the Ft. Meade area in anticipation of activity associated with the Base Realignments and Closure (BRAC) process.

MD 295 Stakeholder Group Meeting
Page 4

Alternative Retained for Detailed Study (ARDS)

Mr. Harrison asked that as the group reviews the alternatives that they keep in mind what the key issues are to them or their groups and the feedbacks will be incorporated into the study process. Mr. Harrison also stated that he will be asking each group member to provide answers to two exit questions at the end of the meeting: first, what do they like the most about the ARDS? and second, what concerns them most about the ARDS? He then turned the ARDS discussion over to Mr. Alvaro Sifuentes.

Mr. Sifuentes began the discussion of the alternatives with the mainline widening of MD 295. He noted that the widening will occur from I-195 south to just south of the MD 100 interchange and the widening will occur in the median with three lanes in each direction.

Mr. Sifuentes described the improvements proposed for Hanover Road, beginning at High Tech Drive and continuing to MD 170 (Aviation Blvd.). He noted that Hanover Road will be widened from two ten-foot lanes to a four lane divided section with 16 foot bicycle compatible lanes on the outside and a twenty-foot median. Mr. Sifuentes also describe that two options were considered for Hanover Road: Hanover Road North Option would keep Hanover Road on its existing alignment, while the Hanover Road South option would relocate it approximately 200-feet to the south near Ridge Road.

Mr. Sifuentes explained that the major proposed improvements and major differences between the alternatives involve the different interchange configurations at MD 295 and Hanover Road. The following summarizes the discussion:

Alternatives Dropped from Further Detailed Study

Alternative 2: Partial Cloverleaf Interchange

Mr. Sifuentes noted that this configuration was designed with two loop ramps off of MD 295 and two signalized intersections east and west of MD 295 on Hanover Road. He explained that this alternative was dropped because it had the greatest number of potential residential displacements, the greatest number of wetland, park, and floodplain impacts.

Alternative 3: Compressed Diamond Interchange

Mr. Sifuentes described that this alternative relocates Hanover Road to the north of the existing alignment. He noted that this alternative was dropped due to wetland impacts, impacts to Patapsco Valley State Park and opposition by the Stakeholder Group.

Alternative 6: Half Diamond/Partial Cloverleaf Interchange

Mr. Sifuentes explained this alternative was a half-diamond configuration on the east side of MD 295 with a partial cloverleaf configuration on the west side of MD 295. It was stated that this alternative was dropped because it had the highest construction costs, required the most amount of right-of-way, highest impacts to streams, and its proximity to Race Road.

Option 1: Hanover Road North Option

MD 295 Stakeholder Group Meeting
Page 5

Mr. Sifuentes described that this option kept Hanover Road at its alignment at Ridge Road. He explained that this option was dropped because it bifurcated a property east of Ridge Road, its proximity to a MAA wetland mitigation site, and potential access issues for existing businesses at the Hanover Road and Ridge Road interchange.

Alternatives Retained for Detailed Study (ARDS)

Alternative 3: Compressed Diamond Interchange

Mr. Sifuentes noted that this alternative configuration is designed with directional ramps to and from MD 295. It also keeps Hanover Road at its current location. He explained that this alternative was retained because it had the lowest construction costs, least residential displacement, lowest amount of floodplain impacts, and requires the least amount of right-of-way.

Alternative 4: Single Point Urban Interchange (SPUI)

Mr. Sifuentes noted that this alternative is similar to a compressed diamond interchange but it allows for left turning movements to be made at the same time. He noted that this type of interchange is the same one used at MD 170 and MD 100. Mr. Sifuentes stated that the alternative was retained because, similar to Alternative 3, it had the lowest number of residential displacements, lowest amount of floodplain impacts, and requires the least amount of right-of-way. He also noted that a disadvantage of this interchange is driver confusion due to irregular configuration.

Mr. Rusty Bristow asked if there has been any increase in accidents at this type of interchange. Mr. Greg Welker, SHA- District 5, stated that he did not feel there was an increase in accidents. Ms. Harriett Levine, Jacobs Civil, stated that accident data and emergency response data can be obtained to verify accidents rates at similar interchanges.

Alternative 7: South Alignment of Hanover Road with Loop and Half Diamond Interchange

Mr. Sifuentes noted that this alternative relocates Hanover Road approximately 200 feet to the south to avoid residential and environmental impacts on the north side of Hanover Road at MD 295. He also noted that a half-diamond and loop ramp interchange is proposed. Mr. Sifuentes explained that this alternative was retained due to its low number of wetland and park impacts as a result of shifting Hanover Road to the south.

Option 2: Hanover Road South Option

Mr. Sifuentes described that this option relocates Hanover Road approximately 300 feet to the south at its intersection at Ridge Road. He explained that this option was retained because it reduces curves in the road, minimizes impacts to property owners, and is further away from the MAA wetland mitigation site.

New Alternatives

Alternative 3 Option A and Alternative 4 Option A

Mr. Sifuentes explained that two new alternatives, Alternative 3 Option A and Alternative 4 Option A have been added to the study. He noted that the new alternatives both

MD 295 Stakeholder Group Meeting
Page 6

employ a minor shift of Hanover Road to the south, similar to Alternative 7. Mr. Sifuentes explained that these changes came about as a result of meeting with Senator DeGrange who asked if the shift to the south could be utilized on alternatives other than Alternative 7. It was noted that these new alternatives will be presented at the Location/Design Public Hearing with the associated impacts and cost information.

A Stakeholder Group member asked if the costs for Alternative 3 Option A and Alternative 4 Option A are similar to Alternative 3 and 4. Mr. Sifuentes responded that the cost estimates are being developed now but he felt that the costs would be similar. A Stakeholder Group member asked if there was an increase in residential displacements. Mr. Sifuentes stated that the new alternatives minimize impacts to Hanover Road properties and lowers the residential impacts.

A Stakeholder Group member asked what would happen to existing Hanover Road under these options. Mr. Sifuentes stated that it still needs to be determined, but it could be converted to a service road with local access only. A member asked about emergency vehicle access to Hanover Road. Mr. Sifuentes stated that emergency access will be maintained to all properties. A stakeholder group member stated that the conversion of Hanover Road to a local access service road could reduce cut-through traffic on Hanover Road.

A Stakeholder Group member asked if Alternatives 3 and 4 are still being considered. Mr. Sifuentes stated that both alternatives will be carried through to the Location/Design Public Hearing. Ms. Harris noted that SHA is not in favor of any one alternative and these new alternatives allow alternatives to be mixed and matched. She noted that Alternative 3 Option A and Alternative 4 Option A also allow for Maintenance of Traffic during construction.

Mr. Harrison asked if the Stakeholder Group members could think of any disadvantages to Alternative 3 Option A and Alternative 4 Option A. There was a discussion among the group regarding near misses and driver confusion with SPUI interchanges, especially with tourists coming to and from the airport. Mr. Weber stated that he felt that when these types of interchanges are used with the turning movements under the roadway it can be dangerous.

Alternative 8: Diverging Diamond Interchange (DDI)

Mr. Sifuentes explained that a new alternative has been developed, Alternative 8, which is the Diverging Diamond Interchange (DDI). Ms. Harris noted that this was not presented at the Alternates Workshop, but added later to the study. Mr. Sifuentes explained the various turning movements with the interchange and played a video that demonstrated how the interchange operates.

A Stakeholder Group member asked where else is this interchange being used. Mr. Sifuentes noted that it is being used in France and it is currently being studied in Missouri and Oregon. Mr. Cardwell asked if the lane geometry would be the same as the video. Mr. Sifuentes said it would be the same except the video shows three lanes, where as there would only be two lanes on Hanover Road in each direction. A Stakeholder Group member asked if the DDI was expandable if traffic warrants. Mr. Sifuentes replied that the configuration of a DDI allowed it to be converted to a compressed diamond interchange and vice versa.

MD 295 Stakeholder Group Meeting
Page 7

Mr. Cardwell noted that it was easier for pedestrians and bicyclists to use the DDI than the SPUI because of the signals. Mr. Weber stated that he felt the DDI allowed for easier left turn movements than a SPUI because the existing traffic movement is being held at the signal.

Mr. Weber asked what the cost for this type of interchange is. Mr. Sifuentes explained that they are currently being developed, but the signaling is the same and you do not need as many lanes as the SPUI, which would reduce costs. He also noted that the study team has met with the Office of Traffic and Safety (OOTs) to discuss the human perspective of the DDI.

A Stakeholder Group member asked if Alternative 8 uses the same shift to the south on Hanover Road as other alternatives. Mr. Sifuentes said it does. Mr. Schuster asked if traffic demand analyses will be performed for all alternatives. Mr. Sifuentes stated that Level of Service (LOS) analysis will be performed. Mr. Weber asked if the Federal Highway Administration (FHWA) is promoting the DDI. Ms. Levine stated that FHWA looks at innovative design techniques and this would be considered one, but they do not necessarily promote them. Ms. Levine also noted that the demonstration video was produced by FHWA. Mr. Weber stated that he feels the DDI is a great solution that minimizes cost and impacts.

A Stakeholder Group member asked if the DDI would increase residential impacts. Ms. Levine responded that it has different impacts, not any more or less.

Mr. Weber asked how pedestrians and bicyclists would be accommodated through the intersection. Mr. Sifuentes explained the study team has met with OOTS to discuss this. Ms. Levine explained that pedestrians and bicyclists would be treated in two ways. First, on-road bicyclists would stay in the outside lane and go through the interchange with traffic following the signals and markings. Second, pedestrians and bicyclists using the sidewalk and hiker biker trail would remain on the outside of Hanover Road throughout the interchange area.

A Stakeholder Group member asked about driver confusion with the DDI. Mr. Sifuentes explained that the possibility exists; however, the skew of the lane alignment can be designed to make it clearer and safer for the driver.

Mr. Weber asked if you can do things with pavement like striping to direct traffic. Mr. Sifuentes said it was possible.

Mr. Cardwell asked about headlight glare coming from opposing traffic. Ms. Levine stated that barriers and screening would be used to reduce glare.

Changes to All Alternatives

Mr. Sifuentes explained that the project limits have been extended from Old Stoney Run Road to just east of MD 170 and Stoney Run Road. He noted that upgrades will be made to the intersection at Future Corporate Center Drive to account for increased traffic at the car rental facility. He also noted that the bridges on Stoney Run Road will not require improvements. He also explained that improvements will be made to the Northrop Grumman entrance.

MD 295 Stakeholder Group Meeting
Page 8

Mr. Sifuentes stated that due to concerns regarding accommodation of bicyclists on Hanover Road, a 10 foot hiker/biker trail has been added to the north side of Hanover Road along the entire length tying into the BWI Trail at MD 170. Mr. Sifuentes also noted that a sidewalk on the south side of Hanover Road is being evaluated.

Mr. Sifuentes noted that changes have been made to the connection to Hanover Road at the CSX tracks that will avoid some property impacts and provide some traffic calming. A Stakeholder Group member asked if there are line of sight problems at that connection. Mr. Sifuentes stated that currently, there are, but the improvements will straighten the connection.

Mr. Schuster asked that he be contacted to follow up with him regarding the relocation of the BWI trail from the east side of MD 170 to the west side per FAA direction. He also stated that he would like to discuss the possibility of providing a ramp from southbound MD 170 to westbound Stoney Run Road to avoid the current flyover ramp configuration. Mr. Sifuentes responded that we will coordinate to set up a meeting regarding both of those issues.

Mr. Cardwell requested that Anne Arundel County be included on any discussion or meeting regarding sidewalks on the south side of Hanover Road. He noted that there is development planned for the south side of the road and the county would like to discuss options for crossings and connections to any developments.

Ms. Bolewski asked how access to existing business along Hanover Road will be maintained with the proposed improvements. Mr. Sifuentes stated that access consolidation options are being looked at. A stakeholder group member asked if storm water management (SWM) has been incorporated into the plans. Mr. Sifuentes responded that it has and is still under analysis. There was a discussion of SWM issues in regards to property owned by Pre-Flight and by MAA.

Mr. Jim Patton asked if there could be additional study of shifting Hanover Road further south to keep development parcels intact for greater development potential. Mr. Sifuentes responded that a further shift south might have increased impacts to the EconoPark property and create impacts to a manufacturing site on the other side of Ridge Road. He also noted that EconoPark has recently built a new parking lot not shown on the map. Mr. Harrison stated SHA will coordinate to discuss further study of the issue.

Next Steps

Ms. Harris explained that the alternatives and associated impacts will be available for review 30 days prior to the Location/Design Public Hearing which is scheduled for summer of 2007.

Public Involvement

Mr. Harrison stated that the Stakeholder Group will meet prior to the Public Hearing to preview the information that will be presented. He also noted that the group can have additional meetings if warranted and that the project team can come out to give a talk about the project to community groups or other Stakeholder groups. Mr. Weber asked if the date for the Public

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| <p>MD 295 Stakeholder Group Meeting Page 9</p> <p>Hearing had slipped from the spring. Ms. Harris responded that it had slipped to summer due to the addition of the new alternatives and other internal issues.</p> <p><u>Adjournment</u> Mr. Harrison thanked the stakeholders for their participation and asked them to write their responses to the exit question inside of their table tents.</p> <p>If you have any questions please feel free to contact Carmelella Harris, the Project Manager, at 410-545-8522 or via e-mail at charris@sha.state.md.us</p> <p>cc: File Attendees Stakeholder Group Members</p> | |
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| <p>SUMMARY OF COMMENTS Alternates Public Workshop Held Wednesday, January 11, 2006 4:30 p.m. – 8:30 p.m. Lindale Middle School</p> <p>Number of comments received to date: 19 comment cards + notes from workshop 94 People attended the Public Workshop</p> <p>ALTERNATIVE 1: NO-BUILD • For: 2 • Against: 2 • Not needed when exists at I-195 and MD 100 exist</p> <p>ALTERNATIVE 2 • For: 1 • Against: 1 <NO SPECIFIC COMMENTS REGARDING ALT. 2></p> <p>ALTERNATIVE 3 • For: 1 • Against: 1 <NO SPECIFIC COMMENTS REGARDING ALT. 3></p> <p>ALTERNATIVE 4 • For: 3 • Against: 1 • Supports this alternative with only one stoplight for traffic flow • Supports Hanover Road being shifted to the south near the CSX tracks</p> <p>ALTERNATIVE 5 • For: 1 • Against: 1 • This would keep traffic moving along Hanover Road during construction</p> <p>ALTERNATIVE 6 • For: 1 • Against: 1 <NO SPECIFIC COMMENTS REGARDING ALT. 6></p> <p>ALTERNATIVE 7 • For: 2 • Against: 1 • This would keep traffic moving along Hanover Road during construction • Provides the ability to pick up speed and merge into traffic when getting onto MD 295 Northbound</p> <p>HANOVER ROAD NORTH OPTION <NO SPECIFIC COMMENTS REGARDING HANOVER ROAD N. OPTION></p> <p>HANOVER ROAD SOUTH OPTION • For: 1 • Against: 0 • Supports this to prevent impact to properties</p> <p>02/07/2006</p> | |
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| <p>GENERAL COMMENTS RIGHT OF WAY COMMENTS</p> <ul style="list-style-type: none"> Access to frontage properties along Hanover Road. Alternative with least residential impacts should be chosen. District Right-of-Way Concerns: During Stage II we will need to take a hard look at access provisions along Hanover Road. This may include the addition of service roads to provide access. It is not anticipated that we will be providing any additional median breaks other than at the public streets. <p>DESIGN COMMENTS</p> <ul style="list-style-type: none"> The project does not markedly improve MD 295/MD 100 Weave failures on MD 295 Bridge over MD 100 Need a signal at the intersection of Hanover Road, the CSX tracks and High Tech Drive Supportive of Hanover Road crossing the CSX tracks to provide access to Anne Arundel County. Request that the bike path be separated from the travel lanes by a barrier or move the bike path to the sidewalk (Northrop Grumman employee). Connect bike lane to a hiker/biker path; install a concrete barrier or 8' sidewalk with on-road bike lanes. Keep posted speed limit low along Hanover Road for bicycle commuters. Consider transitioning to 3 lanes west of MD 295 tie-in to High Tech typical Mistake to narrow Hanover Road at Old Stoney Run Road and should plan on making the entire portion of Hanover Road 4 lanes to accommodate future traffic. One person mentioned improving the crest on Ridge Road at Hanover Road. The project should go to I-95 and create a passenger drop-off-only for pre-ticketed passengers at the end of this road with a subway tram running to the main terminal. End Stoney Run Road to prevent cut-through to the airport. <p>TRAFFIC COMMENTS</p> <ul style="list-style-type: none"> Increased traffic on Hanover Road in Elkridge Request for traffic estimates on Hanover Road west of the changes and Aviation Blvd. Cut-through/increased traffic (and associated speeds) that may occur in the community located in Howard County west of the CSX tracks. Consider queuing at Hanover intersection (at High Tech) so it doesn't back to RR crossing <p>ENVIRONMENTAL COMMENTS</p> <ul style="list-style-type: none"> Construction of sound barriers along MD 295? Flooding and noise concerns along Dorsey Road Update wetland boundaries Wetland issues at high Tech connection Allow for deer crossings via culverts across Hanover Road east and west of MD 295 interchange. <p>02/07/2006</p> | |
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| <p>02/07/2006</p> <ul style="list-style-type: none"> A pipeline containing oil running from Florida to the north crosses through Race Road and north of the proposed interchange. The pipe is buried shallow and is visible in the streambed west of Race Road. MAA and FAA were present at the meeting. FAA wanted to make sure that our NEPA document satisfies their requirements as well. A federal action will occur if MAA/FAA releases property to accommodate Hanover Road should a build alternative be selected. The study team will work closely with MAA/FTA as the project progresses. <p>GENERAL COMMENTS</p> <ul style="list-style-type: none"> County Representative Concerns: As the project moves forward, both Howard and Anne Arundel counties are interested in who will ultimately be responsible for building Hanover Road if a build alternative is selected. The study team has indicated to the counties that SHA will get NEPA approval for the whole project, but that further responsibilities are up for negotiation. | <p>MD 295 Alternates Public Workshop Comments</p> <ul style="list-style-type: none"> 17 Comment cards have been received to date Re: MD 295 Alternates 13 Comment cards were turned in at the workshop 4 Comment cards were received via mail 3 "Help Us Improve" comment cards were received via mail. <p>Based on comment cards received:</p> <p>Unsupportive</p> <p>One person does not support the connection of Hanover Road to High Tech Drive when exits at I-195 and MD 100 exist.</p> <p>One person does not support the interchange when exits at I-195 and MD 100 exist.</p> <p>Bicycle</p> <p>One person noted that he and several co-workers at Northrop Grumman commute via bicycle. They are concerned about the proposed posted speed limit and its affect on bicycle safety along Hanover Road (40-45 mph better than 55 mph).</p> <p>One person requested that the bike path be separated from the travel lanes by a barrier or move the bike path to the sidewalk. This person liked Alternative 4 with only one stoplight for traffic flow.</p> <p>Preferred Alternatives/Options</p> <p>One person would prefer the South option for Hanover Road to prevent impact to his property.</p> <p>One person noted that they support all of the alternatives except for Alternative 5.</p> <p>One person noted that they support Alternative 4. This person also supports Hanover Road being shifted to the south near the CSX tracks.</p> <p>One person noted that they support the project but think it should go to I-95. This person suggested creating a passenger drop-off-only for pre-ticketed passengers at the end of this road with a subway train running to the main terminal. This person also wants to see Stoney Run Road end to prevent cut-through to the airport.</p> <p>One person would like either Alternative #5 or Alternative #7 so that traffic along Hanover Rd. is not disrupted during construction.</p> <p>Traffic - General</p> <p>One person is concerned about increased traffic on Hanover Road in Elkridge.</p> |
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| <p>One person noted that the project does not markedly improve MD 295/MD 100. This person also noted that there are weave failures on MD 295 Bridge over MD 100 (LOS improves from F/F to F/E)</p> <p>One person is concerned about the absence of a traffic signal at the intersection of Hanover Road, the CSX tracks and High Tech Drive. This person is supportive of Hanover Road crossing the CSX tracks to provide access to Anne Arundel County.</p> <p>One person requested traffic estimates for Hanover Road west of the changes and Aviation Blvd.</p> <p><u>Traffic in Howard County</u> One person is concerned about cut-through traffic that may occur in the community located in Howard County west of the CSX tracks.</p> <p>One person is concerned about increased traffic and high speeds that may/do occur in Harwood Park.</p> <p><u>Noise</u> One person questioned if sound barriers would be constructed along MD 295.</p> <p><u>Additional comments taken by staff include:</u> Consider transitioning to 3 lanes west of MD 295 tie-in to High Tech typical Consider queuing at Hanover intersection (at High Tech) so it doesn't back to RR crossing</p> <p><u>Wetland issues at High Tech connection</u> Allow for deer crossings via culverts across Hanover Road east and west of MD 295 interchange</p> <p>One person noted they supported Alternative 2</p> <p>One person said they prefer the no-build Alternative 1 and are concerned about cut-through traffic into Howard Co. community west of RR tracks.</p> <p>One person said they prefer Alternative #1 because it looks like this provides the ability to pick up speed and merge into traffic when getting onto MD 295 Northbound.</p> <p>A pipeline containing oil running from Florida to the north crosses through Race Road and north of the proposed interchange. The pipe is buried so shallow that the top of the pipe can be seen in the stream bed west of Race Road.</p> | <p>One person commented that the Alternative with least residential impacts should be chosen. This person likes Alternative #7 and the southern shift in Hanover Road option.</p> <p>Multiple people mentioned that it is a mistake to narrow Hanover Road at Old Stony Run Road and should plan on making the entire portion of Hanover Road 4 lanes to accommodate future traffic.</p> <p>One person questioned whether a signal would be installed at the CSX crossing and at Hanover/High Tech Drive.</p> <p>One person commented that a bike lane connected to a hiker/biker path makes it family oriented so kids are not riding on the road with cars – safety issues; suggested a concrete barrier or 8' sidewalk with on-road bike lanes.</p> <p>One person is concerned with cut-through traffic across CSX tracks to Howard County communities.</p> <p>One person mentioned improving the crest on Ridge Road at Hanover Road.</p> <p>One person noted flooding and noise concerns along Dorsey Road</p> <p>Multiple people raised questions regarding access to frontage properties along Hanover Road.</p> <p>One person noted that the wetland boundaries should be updated.</p> |
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JUN-01-2005 10:39 FROM:SHA PRO

W. L. Gandy

Route 100 effectively isolated the Harmons Community and Arundel Mills Mall from the rest of Anne Arundel County to the north and east. The Arundel Mills Trail was part of the I-95/Annapolis/RVW Small Area Plan in improving the recreation transportation in the county.

1. Pro Alt. 1
2. Pro. Alt. 3, 4, 5

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Richard B. Hayes DATE 1/8/06
ADDRESS 6215 Hanover Rd
CITY Hanover STATE MD ZIP 21076-1032

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
We recognize that there is continued growth in this area,
but we believe that an expansion at this level is
unnecessary. Residents/businesses in this area can easily
reach the highway + 295. An additional exit is not needed.
If you don't have another entrance to the airport, not on I-495,
airport congestion seems to be solved at the terminal, not on I-495,
that does not mean that widening of Hanover Rd is or will
be needed. A widening to 295 is needed, but a widening of a north
side of the road (on the east of Hanover Rd) is not
needed. It is proposed that close the road to the airport. We would
also like to see the width of Hanover Rd reduced.
Since by
Richard Hayes

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List. ✓
(not on Mailing List)

21-41-01-2005 10:26 PROJECT394 PRO 418 000 5004 T1061418037C77 P.12/25

Pro Alt. 1

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME B. Gottlieb/Steve DATE 1/11/06
ADDRESS 2140 Lee Rd
CITY Hanover STATE MD ZIP 21076

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
I don't see the need for a widening of the road
out. SHD. PA has to much money. Don't
know what to spend it on.
Don't worry about the road.

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

21-41-01-2005 10:26 PROJECT394 PRO 418 000 5004 T1061418037C77 P.12/25

Pro Alt. 1

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21080

NAME Beth Ann Powers DATE 12/14/05
ADDRESS 6075 Claire Dr.
CITY Elkridge STATE MD ZIP 21075

PLEASE PRINT

We wish to comment or inquire about the following aspects of this project:
We like the alternative 3! NO BUDGET. It's great to see a
plan that we do not need to worry about. It's more about the future, the
children, where we're going, where the Main Roads, where people
live. It's great to see a plan that's not just about the future, but
about the present. It's great to see a plan that's not just about the
future, but about the present. It's great to see a plan that's not just
about the future, but about the present. It's great to see a plan that's
not just about the future, but about the present. It's great to see a
plan that's not just about the future, but about the present. It's great
to see a plan that's not just about the future, but about the present.

☒ Please add my/our name(s) to the Mailing List. Added
☐ Please delete my/our name(s) from the Mailing List. on list

* Persons who have received a copy of this brochure through the
mail are already on the project Mailing List.

P-3-3 101-64106372877 418 289 5084 2006-10-11 10:01:54 AM PRO

Pro MD 245 Imp.
Against Hwy. Road

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME RALPH STAEETER DATE _____
ADDRESS 2 LEWINGTON RD
CITY HARRIS STATE MD ZIP 21077

**PLEASE
PRINT**

I/We wish to comment or inquire about the following aspects of this project:

1) I AM CONCERNED THAT MD 295 WILL BE GOOD 11
TO 1.10 IS UNDER UTILIZED. I THINK THERE SHOULD BE NO
NEED TO MAKE ANY CHANGES TO HANOVER RD.
2) I FEEL THAT TO IMPROVE ON HANOVER RD WOULD
BE A BIG WASTE OF TAX MONEY AND A NEGATIVE
IMPACT ON THE ENVIRONMENT.
3) WE DO NOT NEED MORE ADVERT. BUT DO NEED
TO PROTECT THE NATURAL ENVIRONMENT.

☒ Please add my/our name(s) to the Mailing List. *Added*
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the
mail are already on the project Mailing List.

1/15/05 418 889 5304 T0161863767 JAN-01-2006 18:36 PROJECT-DAY PRO

Agilent Hoover Rd
3

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT
NAME J. Wilson DATE 12/15/05
ADDRESS 62841 Winters Lane
CITY St. Havens STATE MD ZIP 21076

I/We wish to comment or inquire about the following aspects of this project:
I see zero reason to add this BRT/alternatives
we built 195' to 100' this is just a waste
and will create more traffic as well as
take away more game space

☒ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.
 * Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 10:36 FROM:SHR PPO 418 039 5804 T0:6418072E77 P.4/25

Pro. Imp. to MD
295

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT
NAME B. Elmer DATE 12/15/05
ADDRESS 6266 Forest Ave
CITY Elkridge STATE MD ZIP 21075

I/We wish to comment or inquire about the following aspects of this project:
MD 295 has been overlaid for
many years. Although the road is
well maintained, maintenance can hold
up the quality of transportation. The proposed
improvements will help the environment
reduce gas consumption, and lessen the
overall commute.

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.
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JUN-01-2006 10:36 FROM:SHR PPO 418 039 5804 T0:6418072E77 P.16/25

Pre Alt 4
16

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Rusty Britton DATE 1-11-06
ADDRESS 2215 Ridge Rd
CITY Harrods Creek STATE MD ZIP 21076

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
Please keep bike path separate from main road
Access by bridge over river to Federal St. bridge
It also looks alt. w/ with only one stoplight
from Traffic Planning

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

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JLN-B1-2005 10/26 FROM:SHR PRO 410 290 3004 T0164180372677 P-10/25

Pre Alt 4
6

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Lyle McCullough DATE 1/11/06
ADDRESS 6216 Harrow Rd
CITY Harrow STATE MD ZIP 21076-1033
(actually in Elkridge)

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
My choice would be Alternative #4
Would like to Harrow Rd moved south a bit so
road crossing is perpendicular to Harrow Rd
instead of the bumpy crossing on the Harrow
Increased traffic on Harrow Rd in Elkridge (where we
is a concern as this would be the start of way
from 225 to Rd 1

☒ Please add my/our name(s) to the Mailing List. Added
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JLN-B1-2005 10/26 FROM:SHR PRO 410 290 3004 T0164180372677 P-10/25

Against Alt 5
2

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT
NAME Bill Hancock DATE 11/16/06
ADDRESS 6525 Andover
CITY Andover STATE MD ZIP 21076

I/We wish to comment or inquire about the following aspects of this project:
Alt Part Act 5
OK WITH ME

☒ Please add my/our name(s) to the Mailing List. Added
☐ Please delete my/our name(s) from the Mailing List.
* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 10:36 FROM:SGR PFO 410 209 5024 TO:64180373277 P.5/25

Pro Alt 5 or 7
9

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT
NAME PAUL DANIEL KATIE ALLYSON DATE 12/14/05
ADDRESS 6286 Manor St.
CITY Andover STATE MD ZIP 21076

I/We wish to comment or inquire about the following aspects of this project:
PLEASE DO NOT INTERRUPT SERVICE ON HANDOVER RD AS WE
COMBINE TO RUN EVERY DAY FOR WORK. IF THERE IS
A BOTTLE PLEASE CHARGE BOTTLE ALTERNATIVE #5 OR #7

☒ Please add my/our name(s) to the Mailing List. Added
☐ Please delete my/our name(s) from the Mailing List.
* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 10:37 FROM:SGR PFO 410 209 5024 TO:64180373277 P.14/25

Pic. Hqn. Road
South Option

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090
(S.E.A. HOLDING COMPANY)

NAME DENNIS WILDERSON DATE 11/10/06
ADDRESS 1300 HANOVER RD.
CITY HANOVER STATE MD ZIP 21076

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:

THE SALARIED EMPLOYEES ASSOCIATION PURCHASED THIS PROPERTY IN OCTOBER 2005. WE WOULD PREFER THE "SOUTH" OPTION FOR HANOVER RD. THERE SEEMS TO BE NO NEED TO IMPACT OUR PROPERTY WITH EITHER OPTION (NORTHER OR SOUTH). WE ARE ALREADY BEING IMPACTED ADVERSELY BY WETLANDS.

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2005 18:38 FROM:SPR PRO 418 899 5804 T016410837277 P.18/25

Misc. Traffic spreading
Issues 2

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME ERIC ZIEGLER DATE 11/10/05
ADDRESS 6416 3 10000N AVE
CITY SLK RIVER STATE MD ZIP 21075

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:

My PROBLEM IS WITH ALL THE EXTRA TRAFFIC THIS ROAD WILL BRING TO WAVER PARK. NOW THAT HIGHWAY RD IS OPEN THE TRAFFIC BAD. THIS SPEEDUP IS GETTING WORSE. SEVERAL PEOPLE ON OUR STREET HAVE CALLED HUNTER COUNTY TO COMPLAIN. WE ASKED FOR SPEED LIMITS. THEY WOULD NOT DO IT. I HAVE CALLED 2-TIME & GET A MESSAGE EACH TIME TO COMPLAIN ABOUT THE SPEEDING. AND THEY DO NOT CALL BACK. THIS WILL JUST BE A SHORT CUT AND ADD UNSAFE CONDITIONS TO OUR AREA. WE HAVE ASKED THE POLICE TO STOP RADAR BUT THEY ONLY DO IT WHEN THE TRAFFIC IS LITE. PLEASE ADD MY/OUR NAME(S) TO THE MAILING LIST. PLEASE DELETE MY/OUR NAME(S) FROM THE MAILING LIST.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2005 18:38 FROM:SPR PRO 418 899 5804 T016410837277 P.3/25

Misc. Traffic Cong.

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11

ALTERNATES PUBLIC WORKSHOP

MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT

NAME MRS. N. Whaley DATE 12/1/05

ADDRESS 6606 HARTHORN AVE.

CITY ELKBRIDGE STATE MD. ZIP 21075

I/We wish to comment or inquire about the following aspects of this project:

"We do not want any more traffic
congestion on major thru in
of Harvard Rd.
Mrs. Florence Stelley

- ☐ Please add my/our name(s) to the Mailing List.
- ☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 18:41 FROM:SHA PPD 410 209 5004 TU:64108373277 P.2/3

Misc. Traffic confer

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11

ALTERNATES PUBLIC WORKSHOP

MD 295

**THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.**

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

PLEASE PRINT

NAME Glenn McCallister DATE 4/11/06

ADDRESS 6216 Hanover Road

CITY Hanover A1 STATE MD ZIP 21046

I/We wish to comment or inquire about the following aspects of this project:

my mine carcase is added back from
Old Wellington road down Hanover street,
has NO trading space along the road from
the railroad on bridge. Keeping suitable
name on game list.

- ☐ Please add my/our name(s) to the Mailing List.
- ☒ Please delete my/~~our~~ name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-21-2006 18:37 FROM:SHR PPO 410 289 5824 TO:64188373277 P.7/23

Misc. Traffic does not improve we go on MD 100

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Matthew Lee DATE 11/10/2006
ADDRESS 991 Corporate Blvd. (MAA)
CITY Linthicum STATE MD ZIP

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
Project does not improve MD 295/MD 100
we have failures on MD 295 Bridge over
MD 100 (LOS improves from F/F to F/E)

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 10:39 FROM:SHR PFD 410 209 5004 T016118037277 P.23/25

Pro All Build Alta. 17

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME William D. Cook DATE 11/10/06
ADDRESS 1255 Stony Road Rd
CITY Howard STATE MD ZIP 21076-1112

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
I have been through this road many times. I have found
that it should go to 95. There should be a proposed
way off - and for the road to be improved for the road
of the road with a sign that says "Road to the right"
I would like to see some kind of sign that says "Road to the right"
at the intersection of the road and the road that goes through the
the road to the right of the road in the road and the road
the road to the right of the road in the road and the road

☒ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

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JUN-01-2006 10:39 FROM:SHR PFD 410 209 5004 T016118037277 P.23/25

Misc. Traffic Issue 14

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Crane Laws DATE 11/10/06
ADDRESS 6212 Winters Ridge
CITY Hanover STATE MD ZIP 21076

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
 1) Do you have an estimate of the congestion levels of Hanover Rd. West of the changes?
 2) Do you have an estimate of the congestion levels of Aviation Blvd.
 Please answer both questions for with & without changes.

☒ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2005 18:38 FROM:SHR PRO 418 299 5804 TO:6418373277 P.20/25

Misc. Traffic Light Concern 4

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Dorothy A. Dorsey DATE 1-11-06
ADDRESS 6430 Hanover Rd.
CITY Hanover STATE MD ZIP 21096

PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
 My concern is do traffic signal at intersection of old Hanover Rd. (Baltimore Trunk) High Tech Rd. and even have Highway.
 I want access across railway to A. Leaky.
 We never see route one, always are Hanover Rd across railway.
 Thanks DAD

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.

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JUN-01-2005 18:37 FROM:SHR PRO 418 299 5804 TO:6418373277 P.15/25

Misc. comment.

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME JAMES ADAMS DATE 1-11-2005
PLEASE PRINT ADDRESS 8213 Academy Road
CITY Elkridge STATE MD ZIP 21043

I/We wish to comment or inquire about the following aspects of this project:
DO NOT CLOSE HARVEY ROAD

☒ Please add my/our name(s) to the Mailing List. *Added*
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2005 18:37 FROM:SPR PRO 418 299 5804 TO:6418837277 P.12/25

Misc. Comm.

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME STEVE DUBROSKY DATE 12/23/05
PLEASE PRINT ADDRESS 6045 Augustine Ave
CITY Elkridge STATE MD ZIP 21075

I/We wish to comment or inquire about the following aspects of this project:
Not enough detailing of issues

☒ Please add my/our name(s) to the Mailing List. *Added*
☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2005 18:37 FROM:SPR PRO 418 299 5804 TO:6418837277 P.13/25

Bike lane 155 ft +
Posted speed
limit.

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME William G. Fedarico DATE 1/11/2005

PLEASE PRINT ADDRESS 6122 Kyle Leaf Ct.

CITY Elkridge STATE MD ZIP 21075-6162

I/We wish to comment or inquire about the following aspects of this project:
My main concern is for bicycle commuting. I currently commute from Elkridge via Harover Road to Northrup Avenue. I have several co-workers who do the same. It would like to know about any bike lanes and or trail extensions.
Also of key concern is the posted speed limit. When you are on a bicycle, there is a big difference between being posted by someone doing 55 versus 45 mph. I would hope the posted speed limit is 40-45 mph max after all it is a short run of road.
Thank you all for your nice presentation - very informative.

☒ Please add my/our name(s) to the Mailing List. Added

☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 18:37 FROM:SHR PRO 418 209 5004 T016410637C277 P.11/25

**STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS**

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Bernard L. Frakas DATE 4 Dec 2005

PLEASE PRINT ADDRESS 7084 Ridge Rd

CITY Harver STATE ind ZIP 21076

I/We wish to comment or inquire about the following aspects of this project:
I notice that at all your proposals you have Harver Rd improvements extending from 295 west to the top of the hill which has very little benefit to anyone except towards the light tower. The improvements you have at exit to Rt 101 Rd and 101 off Oneida Ave. I feel that this money would have greater value improving Ridge Rd yet you be little to improve Ridge Rd with a Red Light at Ridge and Harver Rd. Ridge Rd south serves the Frederick BWT employees Parkview and about 1000 employees. Serving employees in the way would allocate a lot of traffic off Stony Run Rd and Andover Blvd. Ridge Rd worth serves the new part of Transporation Headquarters. Serving these employees this way to add 295 would also allocate traffic on Andover Blvd and Stony Run Rd.

☐ Please add my/our name(s) to the Mailing List. Myself, Bernard L. Frakas

☐ Please delete my/our name(s) from the Mailing List.

* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 18:37 FROM:SHR PRO 418 209 5004 T016410637C277 P.18/25

Misc. Sound Wall 19

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

AA372A11
ALTERNATES PUBLIC WORKSHOP
MD 295

THURSDAY DECEMBER 15, 2005
4:30 P.M. - 8:30 P.M.

LINDALE MIDDLE SCHOOL (CAFETERIA)
415 ANDOVER ROAD
LINTHICUM, MD 21090

NAME Ann Holmes DATE _____
ADDRESS 6964 Ridge Rd
CITY Hanover STATE MD ZIP 21076


PLEASE PRINT

I/We wish to comment or inquire about the following aspects of this project:
Is this going to be sound barrier walls put up
along the section of 275 where there is going
to be 3 lanes.

☐ Please add my/our name(s) to the Mailing List.
☐ Please delete my/our name(s) from the Mailing List.
* Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

JUN-01-2006 18:37 FROM:SHR PFD 418 899 5804 T016418237277 P.8/25

| Record of Telephone Conversation | |
|--|---------------------------|
| Project Name: MD 295 | Project Number: P-692C |
| Recorded by: Heather McClain | Date: 8/24/2006 |
| Conversation with: Esther You | Telephone: (410) 579-1181 |
| Organization: Ban Suk Presbyterian Church in America | Fax: |
| <p>Summary of Conversation:</p> <p>I spoke with Esther You at the Ban Suk Presbyterian Church in America for research for the Environmental Justice Executive Order. I inquired about the for sale sign located on the church property. Ms. You informed me that they plan on selling the property and then relocating within the area. The church will remain the same, just at another location.</p> <p>I also inquired about the congregation of the church. Ms. You indicated that most of the congregation comes from Glen Burnie, Ellicott City, and Baltimore and that the predominant language spoken is Korean. She informed me that everything written is in Korean. Little English is spoken within the congregation.</p> <p>Ms. You is willing to distribute any flyers, etc. for future project development. She was not aware of any other minority or low-income areas or organizations we should contact.</p> | |



SHA
State Highway
Administration
Maryland Department of Transportation

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

November 13, 2006

Re: Project No. AA372A11
MD 295: from MD 100 to I-195; and,
Hanover Road: from High Tech Drive to
MD 170 (Aviation Boulevard)
Howard and Anne Arundel Counties, Maryland

Gaines AME Church
7134 Montgomery Rd
Elkridge, Maryland 21227

To whom it may concern:

The Maryland State Highway Administration (SHA) has initiated a study to improve MD 295 from MD 100 to I-195, and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County. The purpose of the project is to ease congestion and improve existing capacity, traffic operations and safety in the project area, as well as to enhance Hanover Road as a secondary access to BWI and the surrounding areas. Currently, I-195 serves as the primary access to the Baltimore Washington International Thurgood Marshall Airport (BWI) and BWI area services. By improving MD 295 and Hanover Road, the project will enhance connectivity between the Baltimore and Washington Metropolitan regions as it relates to BWI and will support existing and planned economic development in and around BWI. Attached is a study area map for your use. The project consists of six alternatives, which have been retained for detailed study: one no-build alternative and five build alternatives. A description of each of these alternatives is included in the Fact Sheet included with this letter.

We would appreciate your assistance in informing your congregation about the project. A Public Hearing is anticipated for this project during the Summer of 2007. The SHA also wants to provide the opportunity for meeting with you and other representatives of your organization to address any questions and concerns they may have regarding the project.


My telephone number/toll-free number is _____
Maryland Relay Service for Impaired Hearing or Speech: 1.800.735.2258 Statewide Toll Free
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone: 410.545.0390 • www.marylandroads.com

Gaines AME Church
Project No. AA372A11 – MD 295/Hanover Road
Page 2

Thank you for your time and consideration. If you wish to schedule a meeting with SHA representatives, please contact Ms. Carmeletha Harris, the Project Manager, at 410-545-8522 (toll free at 800-548-5026) or Ms. Theresa Christian, the Environmental Manager, at 410-545-8697 (toll free at 800-527-0502).

Very truly yours,


Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by: 
Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

Enclosures

cc: Ms. Theresa Christian, SHA-PPD (w/enclosures)
Mr. Bruce Grey, SHA-PPD
Ms. Carmeletha Harris, SHA-PPD
Mr. Joseph Kresslein, SHA-PPD

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor



State Highway
Administration

Robert L. Flanagan, Secretary
Neil J. Pedersen, Administrator

Maryland Department of Transportation

November 13, 2006

Re: Project No. AA372A11
MD 295: from MD 100 to I-195; and,
Hanover Road: from High Tech Drive to
MD 170 (Aviation Boulevard)
Howard and Anne Arundel Counties, Maryland

Young Jin Lee, Pastor
Ohn-Nuree Mission Church
1027 Andover Rd
Linthicum Heights, Maryland 21090

Dear Pastor Lee:

The Maryland State Highway Administration (SHA) has initiated a study to improve MD 295 from MD 100 to I-195, and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard) in Anne Arundel County. The purpose of the project is to ease congestion and improve existing capacity, traffic operations and safety in the project area, as well as to enhance Hanover Road as a secondary access to BWI and the surrounding areas. Currently, I-195 serves as the primary access to the Baltimore Washington International Thurgood Marshall Airport (BWI) and BWI area services. By improving MD 295 and Hanover Road, the project will enhance connectivity between the Baltimore and Washington Metropolitan regions as it relates to BWI and will support existing and planned economic development in and around BWI. Attached is a study area map for your use. The project consists of six alternatives, which have been retained for detailed study: one no-build alternative and five build alternatives. A description of each of these alternatives is included in the Fact Sheet included with this letter.

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Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone: 410.545.0300 • www.marylandroads.com

MD 295 Project Planning Study


120

Environmental Assessment

Young Jin Lee, Pastor
Project No. AA372A11 – MD 295/Hanover Road
Page 4

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Very truly yours,
Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by: 
Joseph R. Kresslein
Assistant Division Chief
Project Planning Division

Enclosures
cc: Ms. Theresa Christian, SHA-PPD (w/enclosures)
Mr. Bruce Grey, SHA-PPD
Ms. Carmeletha Harris, SHA-PPD
Mr. Joseph Kresslein, SHA-PPD